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WAREHOUSES FOR HAY A NECESSITY.

The question of erecting a warehouse for hay at the Thirty-seventh street railroad station in New York City is again being agitated, and is reported as receiving favorable consideration from the officials of this corporation, says the *Hay Trade Journal*. It is hoped by those in the trade that it will soon end in reality in place of "talk," as heretofore.

That buildings of this kind are necessary for the good of the trade, as well as that of the railroad companies, can readily be seen by a visit to the yards of the N. Y. C. & H. R. R. R. at Thirty-fourth street, the West Shore at Thirty-fifth street, the Erie at Jersey City and the terminals at Palmer's Dock, Brooklyn, N. Y., where goods of this nature are quickly handled from the cars into the warehouses, which not only obviates the delay of cars, an item of great importance to the company, but it also places the goods on the market in a way that is very satisfactory to the trade. After being unloaded in this manner the dealer knows what he has to sell and the buyer can inspect his purchases and all differences of opinion that arise from the system of selling from cars are overcome.

That these terminal facilities are fully appreciated by the trade is proven by the fact that receivers prefer to have their goods shipped over lines having these warehouses, and are making efforts to have them come that way; also from the fact that the railroad companies recognize the necessity and are providing storehouses as rapidly as possible. The hay traffic is run in a different manner from almost any other, and has, undoubtedly, paid the railroad company a handsome profit.

As the dealers in the country are compelled to supply their own storehouses and load their goods, and at the terminals, in most cases, the goods are taken directly from the cars without cost to the company, whereas other freights are received and delivered through houses provided by the company and by men in their employ at a great expense, which does not follow that of the hay trade; in fact, the cost of the

haul on hay is about the only expense attached to it, as the railroads collect storage where they have provided stores for its reception, when the volume of business is figured it amounts to a small sum; and no doubt exceeds, by a large amount, the figures it would be placed at by anyone who had not taken the trouble to look it up. Taking the cities of New York, Brooklyn and Jersey City, as shown by their annual receipts, will pay, during the year, a hay freight of about \$1,000,000, and Boston pays on the same commodity

FARMERS' ELEVATOR AT ST. LOUIS MO.

St. Louis, although a great and growing grain market, has not erected many new elevators of late years, but before the present year has passed the storage capacity of the city will be materially increased. The elevator illustrated herewith was built two years ago. It is called the "Farmers' Elevator," and is built on the banks of the Mississippi River.

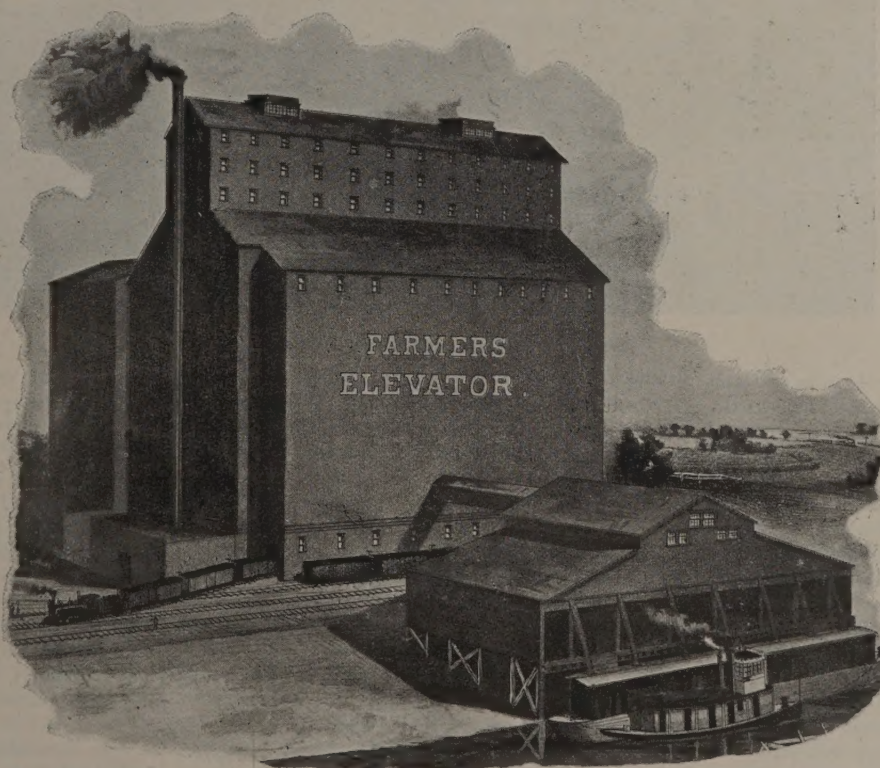
An addition is being built to the north end of the elevator of 220,000 bushels capacity, bringing the total storage up to 820,000 bushels. The 400 horse power Corliss engine which was originally installed will also furnish the power for the addition.

No belting is used in this elevator for the transmission of power. The only belt in the establishment runs between the elevator and the shipping house on the river bank, and it is used not to transmit power but to carry grain. Rope transmission is employed exclusively throughout. The eight stands of elevators are operated by lines of shafting on the top floor, propelled by a large pulley connected by rope directly with the main shaft 155 feet below. No cleaning machinery of any kind whatever is used in this elevator, it being used for storage only.

The "Farmers' Elevator" was built and is operated by the Farmers' Elevator Company, of which W. T. Anderson is president; G. O. Kalb, vice-president, and J. T. Birch, secretary. The company does not deal in grain, but does an exclusive warehouse business and makes its profit on

the storage and handling charges. The elevator is a public warehouse under the state laws, and has been declared regular by the St. Louis Merchants' Exchange. The elevator is new from top to bottom, and no expense has been spared to make it a model storage house. It is complete with every appliance known for prompt handling and safe storage of grain.

The proposed grain palace at Aberdeen, S. D., is certain to be built, the necessary funds having been subscribed.



FARMER'S ELEVATOR AT ST. LOUIS, MO.

about \$400,000. While this seems to be a large sum of money, it only represents a small portion of the amount paid to the railroads of the country, as there are thousands of cars that go to other seaboard cities or interior points that swell the amount paid as freight on this product to immense proportion.

Guides to the World's Fair and Chicago free to grain dealers at the office of the AMERICAN ELEVATOR AND GRAIN TRADE, Room 5, 184 Dearborn Street, Chicago

MIXING BARLEY WITH OATS.

The controversy over the mixing of barley with oats has been running pretty high in the grain trade, and a good deal of acrimonious talk has been indulged in between the opposing parties. The petition requesting the government "not to allow the inspector to pass any oats that he was cognizant had been deliberately mixed with barley, but to inspect according to the provisions of the act governing the inspection," was ably met by Mr. Edward Miall, Commissioner of Inland Revenue, in the following words: "I am requested to instruct inspectors not to pass oats known to have been deliberately mixed with barley, but to inspect according to the act. This does not seem logical. If the standard is too low it should be rejected, and the inspectors would then have left but one recourse, to inspect according to the act. If not too low, I fail to see that it makes any difference to the consignee whether accident or design led to the admixture."

That the standard is not too low is proved beyond doubt by the fact that European buyers have made their purchases on this standard for the past seven months without making any complaints direct to the parties shipping them; and, besides, Canadian oats shipped to England this season have compared very favorably with the quality of American and Russian oats, so that there really seems to be no valid reason for interfering with the present standard; and the Council of the Board of Trade appears to be of the same opinion, that body at its last weekly meeting on Tuesday, May 23, deciding that further action was at present unnecessary in view of the letter issued by Mr. Miall, and above referred to. It has been alleged in the recent controversy that the mixing of oats with barley in conformity with the government standard is a fraud. To this the shippers who are doing the bulk of the export business in oats say that if the oats are fully up to the government's standard and confirmed by the inspector's certificate, there cannot be the slightest semblance of fraud, as buyers are getting exactly what they bought, namely, No. 2 oats, which they know is allowed to contain a certain percentage of barley. They also contend that if it be a fraud to mix barley with oats in order to conform to the standard, it is a far greater fraud to mix different qualities of the same description of grain, such as No. 3 with No. 2 wheat, Nos. 3 and 4 with No. 2 corn, and lower grades with No. 2 peas, as the mixing of these cheaper grades with No. 2 cannot be so readily detected, because it is more difficult to discover a mixture of wheat with wheat, corn with corn and peas with peas; whereas, if a greater proportion of barley is mixed with oats than the standard calls for, the inspector could detect it immediately, and a certificate for No. 2 oats would be refused. And yet it seems that some of those who are opposed to mixing barley with oats approve and sanction the mixing of different grades of wheat with wheat, corn with corn, and peas with peas. This seems to be a strange and anomalous course of reasoning. There cannot possibly be any fraud where grain is sold on sample and delivery made equal to sample. The process followed in shipping oats and other grain from this port is simply selling on sample, our inspector, appointed by the government and independent of the trade, deciding whether or not the shipments are equal to the standards or samples. European receivers, having had these samples in their hands for months, quite understood what they might expect in fulfillment of contracts, so that it resolves itself into the question of the competency and integrity of our inspector. The growth of the inspection business since our inspector was appointed to his position, and the few complaints from European receivers, furnish the best

evidence that can possibly be adduced to his competency, integrity and thorough fitness for the post. We must therefore seek for other reasons than those assigned by the opponents of mixing barley with oats, for their illogical and unsuccessful petition to the government, and their attempt to discredit and belittle Montreal grain inspection, which, as will be seen in another article, is, so far as oats are concerned, ahead of that of the United States and Russia.—*Montreal Trade Bulletin.*

A SOUTH DAKOTA GRAIN MARKET.

South Dakota is famous for its prolific wheat fields and the large receipts of grain at new stations. As soon as a railroad has penetrated new territory grain elevators and warehouses are constructed wherever stations are established, and usually they do a good business the first year. Not every station receives a million bushels of grain the first year, but many of them have done so.

In the northern part of South Dakota in McPherson county is a young town called Eureka, which annually receives more grain by wagon than is usually received in five or six years at country stations. We give herewith two illustrations showing farmers mar-



MARKETING GRAIN AT EUREKA, S. D., 1891.

keting wheat and flax at Eureka in 1891 and in 1892. Of the 1891 crop 1,768,000 bushels of wheat and 370,000 bushels of flax were shipped from Eureka, and up to May 1 2,140,000 bushels of wheat and 540,000 bushels of flaxseed of the 1892 crop had been marketed at Eureka. It was estimated by good judges that 20 per cent. still remained in farmers' hands.

The wheat acreage of the territory tributary to Eureka is being steadily increased. The acreage sown to flax this year will probably exceed last year's acreage by 300 per cent. Late letters report the crop in good growing condition and plenty of moisture, so the prospects are that Eureka will ship more from this year's crop than ever before.

Call at Room 5, 184 Dearborn street, and get free a copy of our souvenir guide to the World's Columbian Exposition and Chicago.

After seeing the war of bulls and bears on the Board of Trade grain dealers visiting Chicago should not fail to see Buffalo Bill's "Wild West" show outside the World's Fair grounds. Performances are given every day at 3 and 8:30 o'clock.

Small baled hay for the Philadelphia market should be baled with three wires instead of two, for the reason that in the handling and unloading cars into warehouses there are from five to ten bales broken in each car. This is a loss to either the receiver or shipper which could be avoided by having the extra wire. In exporting hay, two-wire bales will not stand the shipping, and could not be used for the purpose.

PITTSBURG AS A GRAIN CENTER.

Pittsburg is one of the great grain centers of the country. She has been noted for her iron and steel industries, but little is ever said regarding her grain market, say the *Pittsburg Dispatch*. It nevertheless deserves the highest commendation when its wonderful progress is noted. The Grain and Flour Exchange is the strongest of the various business exchanges in the city. Its members are live, energetic business men, who have erected a monument of grain to the city.

G. W. C. Johnston, president of the Exchange, said yesterday: "For years Pittsburg has long been discriminated against by the railroads in the grain trade. Lack of switching facilities and track room prevented our getting any concessions which would benefit us until little over a year ago. It was then we obtained a prorating arrangement which has done more than anything else recently for the grain trade of Pittsburg. This prorating arrangement has put Pittsburg on an equality with every other city in the country. By the prorating arrangement we are enabled to order large numbers of cars here. In case we cannot find a market for them in Pittsburg we still have the advantage of the through rate by paying the prorated fee."

"Pittsburg is perhaps one of the greatest grain consuming cities in the country. Our teaming here is greater than any other city's, which partly accounts for it."

"We have a prosperous grain and flour exchange, doing a legitimate business. We have a call between 11 and 12 o'clock at which we sell cars under the hammer. Our Exchange was organized in 1882 and has been growing ever since. This prorating arrangement gave us a big boom and increased our membership considerably. We now have 120 members doing business upon the floor. We are the strongest and most flourishing business body in the city. People of the city have no idea of the extent of the business transacted on our Exchange. I will give you the amounts of the various kinds of grains sold on our Exchange during the year of 1892. These amounts do not include the shipments made by river: Flour, 3,190 cars or 598,125 barrels; wheat, 2,910 cars or 1,818,750 bushels; corn, 2,466 cars or 1,541,250 bushels; oats,

3,351 cars or 4,188,750 bushels; rye, 1,296 cars or 750,000 bushels; barley, 1,165 cars or 728,125 bushels; hay, 4,304 cars or 43,040 tons; straw, 1,258 cars or 15,096 tons.

"You can see by this that we did an extraordinary business, taking the immense amount of grain that is also shipped by the river into consideration, of which we have no record. This was for last year; our report for 1893 we expect to exceed this by a great deal."

"We have been dickering with the railroads for one improvement that we need very much. It is a pair of hopper scales so that we could give the grain sent out here an official weight. As it is now, the grain coming from points which have no scales is sold and then we must take the purchaser's weight to go by. This is very unsatisfactory; we should have scales here. It looks as if the railroads would accede to our request. We are greatly in need of an exchange building. We have been hampered with renting for the last 15 years and it is time we had some building of our own. In my report which I will read in June I will recommend the erection of a suitable building for this purpose."

Senator Mattes of Nebraska has been chosen by Secretary Morton of the Department of Agriculture to promote the sale of American corn and tobacco in Europe.

Twenty acres of wheat has been planted near Aberdeen, S. D., the proceeds of which is to be used as a campaign fund by the Farmers' Alliance. Various farmers contributed seed and labor.

DELAYS TO FREIGHT IN YARDS.

When the demand for transportation is light all classes of freight are moved with the least delay. When business becomes brisk traffic movements are slowest. It would naturally be expected that the increased demand for transportation in busy seasons would result still further in minimizing delays and accelerating traffic movements, but such is not the case, as is well known to all traffic and transportation men. These facts, it must be admitted, are somewhat of a reflection upon the operating service, and are suggestive of certain weak spots which it may be well to locate and examine. A weak spot in a bridge, or the permanent way, by which the regular flow of traffic is retarded, usually receives prompt and effective attention from the management. If a weakness is discovered in the operating service it should likewise be corrected, but an effective remedy in the latter case is not so easy to find and apply. Why should not traffic make as good average time in the busy season as in the dull season, all other things being equal? In answering this question reference will be omitted to more than one of the principal causes. The comparatively slow movement of through traffic in busy seasons is not due to slower speed of trains between stations and yards, as it is quite certain that trains make about as good average speed as usual. It is due largely to the unnecessary delays in division and terminal yards. These delays may in some cases be augmented by a shortage of power to move the maximum traffic over the road. Assuming, however, that sufficient power is provided, these remarks will be confined to a consideration of those problems which belong strictly to the operating service, and are subject to correction through a more perfect discipline and system.

There appears to be a feeling upon the part of most yard employees who attend to the inspection, repairing, switching and other details of yard work that it is not wrong to delay a train of ordinary freight for several hours to permit them to leisurely do their work. Every car which passes through the yards must pass through the hands and under the eyes of several different sets of men, some of whom report to the motive power and rolling stock department, and others to the transportation department. Everyone familiar with yard work knows there is not always harmony of action between these different sets of men, and that needless delays are the result. When an occasional train of live stock, perishable freight or high-class merchandise comes in the yard they are all taught to get to work at it immediately upon its arrival and push it through without delay. This teaching, however, does not extend to common freight, which largely predominates. With such freight they take many unwarranted liberties. To the average commercial man there is no plausible reason for taking longer to handle a train of one class of freight than another.

The movements of these perishable and high-class commodities are very closely guarded by the supervising officials of the operating and traffic departments, but the movements through the yards of ordinary freight trains are not, as a rule, carefully watched by anyone. There are few, if any, officials who make it their business to supervise the work in the numerous division and terminal yards with the view of avoiding delays to freight. The yard pay roll is, however, closely watched with the view of keeping the number of switching engines and men down to the lowest possible point, even at the risk of seriously delaying the movements of traffic.

The officer in charge of traffic movements on each district or division is interested mainly in moving trains expeditiously over his territory. A detailed record of each and every unusual delay on the road

and its cause is kept in the train dispatcher's office. Engineers, conductors and train dispatchers are held to a strict accountability for getting trains over the division with the minimum amount of delay. Any one of them causing an unnecessary detention is severely reprimanded. A high rate of speed is maintained between division terminals, and the record on the dispatcher's sheet showing trains to be making good average time is scanned with much satisfaction by the division superintendent. His careful supervision, however, usually ends with the arrival of the train at the end of its run. It is taken for granted that the yard men will do their work as promptly as possible with the force at their disposal, and no check is kept against them to show the results accomplished. Unless some long suffering patron of the road makes complaint the delays in yards seldom come to light. A car or cars may be held from a few days to a week or more, through the carelessness of yard employees, and it would never be known to the responsible operating officer, unless the shipper or consignee made complaint. It is unnecessary to add this is radically wrong.

In most yards there is only one set of men to perform certain duties, and they can attend to only one train at a time. If only one train arrives in the yard at one time, and there are no trains immediately pre-

systematize the handling of the business so that it could be promptly done with a given force. The weak spot appears to be that no allowance is made for the necessary expansion and contraction in the volume of traffic passing through the yards in a given time, due to the well-known irregularity of freight movement. The terminals at either end of a railroad are the key to the capacity of that railroad to handle a given amount of traffic within a given time. The division yard at either end of a division may limit the capacity of that division, or of the whole road, to handle the traffic forwarded from the terminals. Assuming that the track capacity of a certain yard is 2,000 cars per day when promptly handled, and the force is arranged on the basis of handling 1,000 cars per day, which is the average business, what would be the effect if 1,500 cars are unexpectedly thrown into that yard within half a day, and several hundred more on the road to be delivered during the next half of the day? Obviously, unless the force is temporarily increased to meet the emergency, no more trains can get into that yard for many hours. The crews and engines are held out on the road, depriving the men of necessary rest, and restricting the availability of the power for moving the traffic offered. A blockade, with its attendant confusion, is the result, temporarily paralyzing the whole road. The fact that such things frequently occur and that ordinary freight is badly delayed under the very eyes and with the full knowledge of the operating officers begets a feeling on the part of the yard men that these delays are unavoidable, and are expected as a matter of course. In establishing the justice and legality of the demurrage principle the roads have taken strong ground that delays must be paid for.

In allowing a sentiment to exist and grow among yard and train employees that delays in yards are bound to occur, and training them to the knowledge that such delays are seldom investigated, we believe the railroads are doing themselves and the shipping public an injury. Former loose methods of yard supervision can and must be improved to keep pace with the demand for better average time in the transportation of freight, and the imperative necessity of increasing the average performance of car equipments.—*Railway Equipment Guide*.

SUGAR FROM CORN COBS.

"We have all heard," says Colonel Clement F. Carter of St. Louis, "of how corn is used under certain conditions for fuel, and I believe that the time is coming when people will be able to live almost exclusively on corn and corn products. The latest triumph in this direction that has come to my notice is nothing less than the manufacture of imitation maple syrup and sugar from corn cobs. When corn is raised in large quantities the cobs are looked on as a nuisance, and I imagine they could be bought by the carload at a very small price. If, however, this latest development becomes a success, the figure is liable to rise rapidly. It has been found that after the cobs have been boiled long enough a liquid is obtained which, by adding a very small portion of sugar, becomes almost as palatable as maple syrup, and which can be evaporated into something which would pass as very average maple sugar. With corn capable of producing bread, starch, oil, sugar and a dozen other articles, the idea of its being sold under any conditions as low as 20 cents a bushel is idiotic. It ought to be worth almost its weight in gold."

M. W. Hanley, Chicago, Ill.: "I have been a subscriber to the AMERICAN ELEVATOR AND GRAIN TRADE for two or three years, and still take it, in fact I would not be without it."



MARKETING GRAIN AT EUREKA, S. D., 1892.

ceding or following it, the delay may not be excessive if the men are prompt in getting at their work. It is frequently the case, however, that two or more trains arrive close together. Indeed, it is the rule with many roads to run their freight trains in schools of three or five or more sections each, and sometimes trains get bunched on the road.

The writer has known in his experience from seven to ten long freight trains to arrive in a certain busy yard only a few minutes apart, and perhaps no more would arrive for three or four hours. Then seven to ten more might arrive within the next hour. It inevitably follows that some of these trains will be quite seriously detained if there is only one set of men to attend to them. The yard master generally receives, or should receive, telegraphic advice at least an hour in advance of the arrival of all freight trains. Should he not be given ample authority to order one or more extra set of inspectors, repairers, chalkers, and provide himself with a sufficient number of yard engines and switchmen to expeditiously handle any threatened accumulation of traffic instead of allowing it to block his yard and the main track leading to it for hours, and perhaps days?

The regularity of the freight service is disturbed by so many unforeseen circumstances that regularity is the exception, not the rule. Should not this fact be recognized in organizing the yard service; in other words, should it not be made flexible enough to meet the irregularities of the service? If the arrival of trains could be timed at regular intervals, as is the case with passenger service, it would be possible to

MEY'S GRAIN DRIER.

So much grain is damaged in transit by water that cheap and practical means for drying and rendering it merchantable has long been needed at lake ports. Elevator men often have cargoes of wet grain offered them at the price of chicken feed, which, if they possessed the means for doing so, could be dried and sold at a handsome profit. A few are prepared to handle this stuff. Some have built driers in their elevators, using steam heat or hot air, and some have bought machines ready made or built to order.

The grain drier invented by F. H. C. Mey, the engineer, of Buffalo, N. Y., will take any material, no matter how wet, and after drying will cool the same and deliver it to the storage bin. Mr. Mey attains this result by a combination of heat and motion. One of his driers is shown in the cut given herewith. It has a capacity of 100 to 24,000 bushels in 24 hours. The idea is to repeatedly subject the grain to a strong blast of hot, dry air. That every portion of the mass of grain may be acted upon, it is necessary that it be prevented from caking, and that the whole be kept in constant motion. This continual mixing secures an even drying, which is much to be desired, as any damp portions would cause the grain to heat and spoil when stored.

The drier consists of a series of hollow pans, one above the other, and, as accessories, a cooler, two elevators, two fans and a hot air stove. The illustration shows plainly the relation of the parts. The top of each pan is an endless apron, 12 to 14 inches above the bottom. The bottom and sides are made of sheet iron and lined with brick. The endless apron is constructed of perforated slats, which are fastened to a chain belt and overlap each other, with a narrow space between the slats.

When in operation the grain is elevated and distributed over the upper pan, and by a continuous movement passes to the end of the pan, whence it drops to the one next below, and so on, until it reaches the receiver underneath. It is again elevated by the same elevator and put through the same process, and this movement from top to bottom repeated until the grain is dry, which requires from one to four hours, according to circumstances. The grain is then elevated into the cooler *E* by the second elevator, and thence to bin, car or boat.

Heated air from the stove is drawn by a fan and forced into the hollow space under each pan with a pressure of from one to four ounces, as may be desired. As the bottom and sides of the pans are air tight and lined with non-conducting brick, the heated air being forced into the hollow space can only escape through the opening of the slats into the grain, so that no heat is lost, the grain being in constant motion. A thermometer is attached to the air pipes, enabling the operator to carry any degree of heat uniformly. The movement of the pans can be regulated to keep the grain on them any length of time. The operator at all times has perfect control over the degree of heat, the volume and pressure of the air, the speed of the pans, the depth of the layers of grain on the pans and the capacity. An advantage which this drier has is, that the pressure with which the hot air is forced through the slats and through the grain is sufficient to carry off all moisture.

When used to cool heated grain the *modus operandi* is the same, only the fire is extinguished and the grain passes directly out through the spout instead of the cooler *E*, as the fans alone are sufficient. The whole apparatus, except the elevator legs, is made of iron, very solidly put together. Considering the great capacity, very little floor space is required. The number, width and length of the pans can be varied to suit circumstances or to fit the building in which it is to be set up. In economy of fuel and power this drier is claimed to lead all others. This apparatus is used to dry and cool all kinds of grain; to dry brewers'

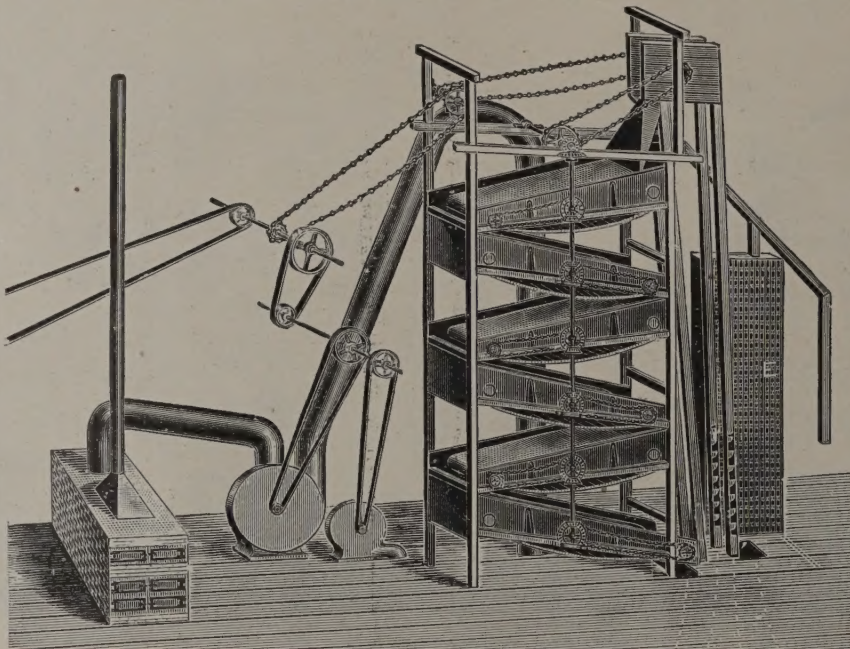
grains without souring, to dry distillers' slop perfectly sweet, to dry the feed refuse of starch and glucose factories, and in mills to dry oats for oatmeal, the germ feed of corn goods mills, etc., etc. Further information concerning the drier can be had on application to the builder, F. H. C. Mey of 64 to 68 Columbia street, Buffalo, N. Y., where he has two of them in operation on a large scale.

Shippers and elevator owners have found this drier of incalculable benefit. A cargo of grain becoming heated while in transit, on its arrival can be run over the drier before storing in the elevator, and the grain once subjected to this process can be kept in perfect safety for any length of time. Grain becoming heated while in store can be run over drier and returned to bin in prime condition.

"A KETTLE OF FISH."

BY OBSERVER.

In the April number of the AMERICAN ELEVATOR AND GRAIN TRADE was an article, copied from the Montreal *Trade Bulletin*, which bristled with two points at least. One point was, that rottenness is not confined these days to the geographical lines bounding the little kingdom of Denmark, and the other was that for colossal stupidity the authorities complained of are head and shoulders above the typical schwope.



MEY'S GRAIN DRIER.

By referring to the article in question we learn that a patent automatic scale register with a key was provided by the elevators for the purpose of detecting people who were engaged in stealing grain from shippers. It is admitted that the machine is a good one, and, with the key in the hands of the proper persons, would be effectual. But to the disgust of the writer in the *Bulletin*, the whole machinery for detecting the thief is complacently put into the hands of the thief himself. Now, I am sure that every reader of this article will agree with the Montreal writer that for unalloyed stupidity this piece of business would call for a quitclaim deed to all the bakeries in Chicago. If the Montreal writer is correct in his view of the case (such a gross breach of horse sense seems almost incredible), the shippers who ship through the Montreal elevators are in a bad way. Also the parties who sold the machines and the inventor thereof are not on the high road to fortune or fame by reason of the successful operation of their thief-detecting machinery.

In view of the statements made in the article, and in view of some facts touched upon in counter-statements which will be set forth presently, the writer's disgust is as deep-seated as that of the *Bulletin*. There is, however, a slight misapprehension by the Montreal party of the uses of the machine and key referred to, which changes somewhat the aspect of the matter he complains of. Unless I am very much in error, the automatic register and key were purchased of a prominent scale house in Chicago and is the invention of one Demuth of Toledo, with whom I am intimately

acquainted. I know his machine also like a book, and I am sorry to state, to the confusion of the Montreal complainant, that the register and key were never intended for the purpose which he has assumed. This makes a difference so far at least as the machine is concerned.

The object, as well as the operation of this device, was clearly set forth in the AMERICAN ELEVATOR AND GRAIN TRADE not many months ago. It was plainly explained and asserted by the inventor at the time the Chicago firm contracted for the right to make and sell the register, that it was not intended to detect dishonesty. It was designed as a check on bona fide mistakes only. If the Montreal writer had had a practical knowledge of the register he would have been able to see at a glance that even with the key in the hands of the proper person the willful thief would need only to open the scale bottom while the grain was running into the scale from the spout or garner above to steal all he cared to, and at the same time without affecting the record of the machine. If the Montreal elevators purchased these automatic registers under the impression that they were getting a check on the dishonesty of their employees, they purchased a farce sure enough.

I happen to know a good deal about this automatic affair. I know that it was used in the L. S. & M. S. Elevator "B" at Toledo for two years before the in-

ventor offered it to the Chicago house. During these two years of practical use the clerk of the elevator kept the key to the register, not with any thought or purpose of detecting stealing, but with the single purpose of detecting errors in tallying as it was done by the elevator weighman and the vesselman. Let me be plain as possible now, because the machine is an honest one, and if it has proved to be a farce, as the Montreal *Bulletin* claims, it is because of the stupidity of those who have been using them for a purpose they were never intended for. Where only two men are checking drafts from an elevator into a vessel, if one makes a mistake, that is, if the tallies are found to disagree, there arises a misunderstanding. If one is sure he is right, the other is apt to be just as sure; and when neither one is able to show any proof aside from his own pencil marks, it's apt to be unpleasant. In a case like this, these two men are the only persons under heaven who know anything about this difference

between them. If one or the other gives in, do they mention it broadcast? Not so. Perhaps they'll split the difference. At any rate they can fix it up without bothering anybody else about it.

Here is where the automatic register comes in. Not being able to tamper with the record made by the register, they must submit the matter to the person holding the key to the letter combinations. During the two years this register was tested this very thing happened a number of times. The elevator weighman knew that if there was one draft too much or one draft too little delivered to the vessel, the clerk in the office down town would discover it by means of the combination of letters returned to him with the shipping order.

As I have said, I know this machine and the inventor thereof like a tale that is told. I know that during the two years this register was tested the elevator weighman went to the office a number of times to find out how they stood. In short, the practicability and usefulness of the register were fully established before the inventor made any effort to place his register on the market.

The Montreal *Trade Bulletin* says that the thing is a farce, because, forsooth, it won't catch a thief. Of course the writer does not know what the makers and venders claimed for it, but if they claimed more than the inventor himself, the elevators at Montreal should put in for a rebate at once. I suspect, however, that the *Bulletin* has but a partial view of this matter, and like many others who think they could straighten out this shortage trouble if people would only follow their

advice, he is barking up the wrong tree. Let me anticipate the remark that perhaps the writer is himself one of the "many others" who have been barking up the wrong tree, by stating that I know perfectly that his prescription, which has been given repeatedly in the columns of this journal, is not a cure-all. What is claimed is, that the problem of an absolutely correct record of weights must first be solved before any else can be done.

As a sample of some of the rickety statements of those who are making an honest and righteous effort withal to mend this matter, let me quote from this article in the *Bulletin*: "We repeat that the automatic system of weighing grain as hitherto carried out by the Montreal Elevator Company has been a huge failure and a great mistake, as it has simply been the means of inviting wrong doing by putting the key of the register into the hands of the very men it was intended to check. A greater incentive to irregularities it is impossible to conceive, and as a result thereof (sic) one of the captains and one of the weighers pleaded guilty to stealing grain from their respective elevators."

In the first place he means "the automatic system of tallying grain," which is quite a different thing. The automatic register has nothing to do with weighing the grain. He says further that "the automatic system... has simply been the means of inviting wrong doing by putting 'the key of the register,' etc., etc. Of course he does not mean this at all, for the automatic system never put the key into anybody's hands. The key was misplaced by those who were either too indifferent or too stupid to put it where it belongs. He says further: "Another season will commence with the opening of navigation, and what our grain shippers ask is, that the Montreal Elevator Com-

pany take steps to properly apply the safeguards of the automatic registers by putting the key in the custody of some competent and disinterested person instead of leaving it with the very men it is supposed to check," which is to the point. In the next breath, however, he wants sworn weighers, as if sworn weighers were any less liable to make mistakes than those who haven't gone through the operation of hoisting their right hand while a notary says "s'elpyugod."

Speaking of swearing, I wish to state that in the next issue of this journal, Providence and the editors permitting, there will be some swearing done by the writer to statements which will, or ought to, throw light—not a blue light—on this question of errors. These statements will be corroborated by some outside evidence, which it is confidently believed will weigh more than the swearing.

The Hay and Straw Dealers' Association of New York state at its recent annual convention in Syracuse drafted an earnest petition asking Congress to let the duty on imported hay remain as it is, \$4 per ton.

A wealthy farmer of Wood Co., Ohio, was recently swindled out of \$5,000 by a fanning mill agent. The farmer was induced to sign a contract to act as agent. Soon after he received a bill of lading for thirty fanning mills at \$50 each, and notice that seventy more were on the way. The banks hold his notes for \$5,000.

A NEW FIELD FOR ELEVATOR MEN.

Within the past year or two proprietors of a number of small elevators in the West and Northwest have found it very profitable running a hay press in connection with their elevator. The late improved steam power hay press can be operated with a six or eight horse power engine and can be run very profitably if operated in connection with regular elevator work.

We have lately examined a plant the like of which could be utilized by owners of small elevators to advantage. The plant in question has the engine on the opposite side of the elevator from the railroad, the main belt runs from the engine to the second story, the shaft running through the building and extending about 18 inches on the outside. On this extension is placed a pulley. A small hay barn is situated about 300 feet away from the elevator, alongside of the track.

The power is transmitted by means of rope transmission and countershafting, from which a belt runs down to the hay press. The proprietors buy small lots of hay as they are brought in by the farmers, who are needing money at various times, and when they get their barn full they start the press to work and bale it out. The barn will hold about 50 tons of

hay presses driven by steam power. The "Champion" Press can be utilized to advantage by elevator men, and we are satisfied that it would be profitable to a large number of elevator men to investigate the hay press.

The Famous Manufacturing Company, corner of Randolph and Canal streets, Chicago, will send full information concerning their machines on application. When you visit the World's Fair see their exhibit, which is located at Post 3, Implement Annex to Machinery Hall.

RULES FOR GRADING HAY.

The subject of grading hay has been one of the most important of any of the numerous factors connected with the hay trade, and has undoubtedly been discussed and rediscussed more than any other one. It has also been one of the questions in the trade that has caused more trouble and dissatisfaction between shippers and receivers than any other that is brought forth in hay transactions, and the farther we go the deeper it seems to get.

The grades established by the cities of Cleveland, O., St. Paul, Minn., Racine, Wis., Kansas City, Mo., Pittsburgh, Pa., and Washington, D. C., except New York, vary very little from those established for the trade

by the Chamber of Commerce of Chicago, and while they vary but little, these variations are sufficient to cause misunderstandings between shippers and receivers West and East.

As this is of vast importance, it would seem that it would be beneficial to the trade in general, if the Western cities would make their grades to conform with those of Chicago and the Eastern cities with those of New York, as laid down by the Hay Exchange. By so doing, it

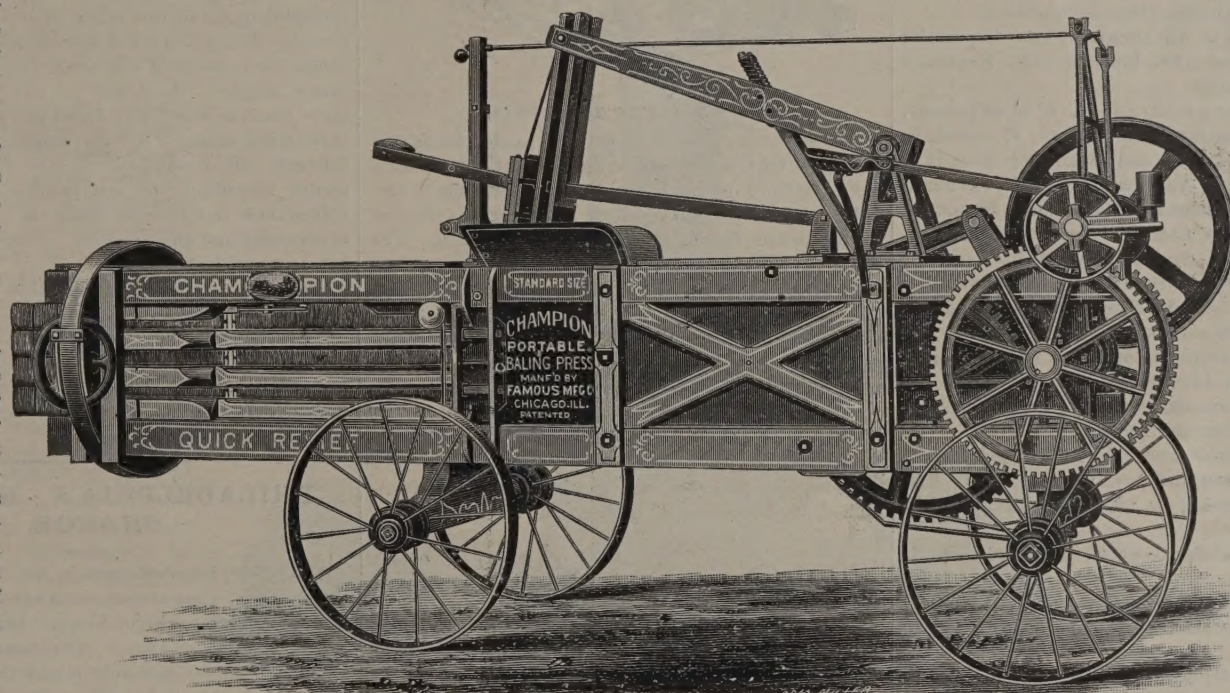
would simplify matters very materially, as there would be but two grades to go by, either New York or Chicago inspection.—*Hay Trade Journal*.

ADULTERATED FEED.

Do the oatmeal millers sell oat hulls to other millers for mixing with ground corn sold to owners of city horses? We are told that they do. And what sort of mill sweepings and screenings are mixed with the bran that dairymen buy? We want to see the light turned on this feed business. Feed should be sold under a guarantee analysis the same as fertilizers, and we have got to come to it.—*Farm Journal*.

That is an important suggestion. The fiend of adulteration is not only trying to supplant the farmer in the production of food, but it is bound to corrupt and debauch every bit of food he buys for his family and his live stock. Millers are buying machines to grind white corn bran with wheat bran to sell as wheat middlings. Every farmer that attends a political convention hereafter, state or national, should insist on a vigorous plank in the platform, against the adulteration of food. It is time to make a political question of it, else the lawmakers will never make laws against it.—*Hoard's Dairyman*.

A worm is eating up whole fields of clover in the northern counties of New Jersey. These worms make a clean sweep, leaving nothing but the roots, and farmers are at a loss to stop their ravages.



THE CHAMPION PORTABLE BALING PRESS.

loose hay, amounting to about five cars of baled hay. They can bale this out in about three days, and usually they wait until the roads get bad, so that the farmers cannot get into market with their hay, when it is a good price, and they are able to realize more than the average market for all the hay they bale.

The plant in question is using a "Champion" Belt Power Press, an illustration of which is given on this page. The manufacturers of this machine are exhibiting at the World's Fair a self-tying hay press, which ties its own bales, so that the elevator men will be able to bale hay with much less working force than they have in the past. This machine is constructed of all steel, and without doubt will bale the largest quantity of hay in the least time. The toggle and crank are set with such relation to each other that it requires only two-thirds of a revolution of the driving gear to push the plunger in, while only one-third is required to pull it out. The plunger is thus quickly withdrawn and escapes the rebound force of the material.

A valuable feature in connection with the power is the safety break-pin, which, in case the machine is subject to any undue strain, is cut off, allowing the gearing to run on until stopped by the operator, when a new pin is quickly inserted and all is ready for work, on the same principles of a break-pin in a cultivator. The machine is always under the control of the operator by means of the friction clutches and stop lever, so that it is not necessary to start the engine when starting the press, as is the case with other

LEGAL WEIGHT OF BUSHELS IN DIFFERENT STATES.

Many lists of these have been published, but if correct when started, they have been subjected to so many typographical errors that they are seldom if ever just alike in two papers. The accurate figures as recently furnished by the secretary of each state to the national agricultural department are in a specially convenient form for reference. The bushel is the Winchester bushel of about 2,150½ (2,150.42) cubic inches, which is adopted as the United States standard. Some states have no legal standard bushel except for a few leading articles. New York and Rhode Island do not appear in the records below, their secretaries, alone of all the states and territories, failing to reply promptly with full particulars.

Corn, shelled, 56 pounds, all except 52 pounds in California and Idaho; ears, 70 pounds, except 68 pounds in Ohio and Indiana; 54 pounds in North Carolina and 72 pounds in South Carolina; cornmeal, 50 pounds, except 48 pounds in Alabama, Georgia, Florida, Mississippi, Arkansas, Illinois and Wisconsin; 46 pounds in North Carolina and 44 in Delaware.

Wheat, 60 pounds in all states and territories; wheat bran, 20 pounds in all states.

Oats, 32 pounds in all, except 26 pounds in Maryland, 30 pounds in Pennsylvania, New Jersey, North Carolina; Montana, 35 pounds; Oregon, 36 pounds.

Barley, 48 pounds in all, except Oregon 46 pounds; Idaho and California, 50; Pennsylvania, Kentucky and Georgia, 47 pounds.

Buckwheat varies greatly, i. e., 40 to 56 pounds. It is 40 pounds in California and Idaho; 42 pounds in Texas, Minnesota, Oregon and Dakota; 48 pounds in Maine, Massachusetts, Vermont, Connecticut, Pennsylvania, Florida, Alabama and Michigan; 50 pounds in New Jersey, North Carolina, Tennessee, Ohio, Indiana, Wisconsin, Kansas; 52 pounds in Virginia, West Virginia, Georgia, Arkansas, Illinois, Iowa, Missouri, Nebraska, Colorado, Montana; 56 pounds in South Carolina and Kentucky.

Rye, 56 pounds, except 54 pounds in California and Idaho; 60 pounds in Arkansas.

Beans, white, 60 pounds, except 62 pounds in Maine, Vermont and New Hampshire.

Castor beans, variable from 45 to 62 pounds. It is 46 pounds in Michigan, Indiana, Illinois, Iowa, Missouri, Kansas, Nebraska, etc.; 60 pounds in Ohio, New Jersey, etc.

Peas, 60 pounds in all, except 50 pounds in North Carolina.

Clover seed, 60 pounds, except 64 pounds in New Jersey and North Carolina; 62 pounds in Pennsylvania.

Timothy seed, 45 pounds in all, except 42 pounds in Dakota; 60 pounds in Arkansas.

Blue grass seed, 14 pounds in all.

Millet seed, 50 pounds, except 48 pounds in Iowa.

Flaxseed, 56 pounds, except 55 pounds in New Jersey and North Carolina.

Hemp seed, 44 pounds everywhere.

Cotton seed, 28 pounds in Tennessee; 30 pounds in North Carolina, Georgia and Louisiana; 32 pounds in South Carolina, Alabama and Texas; 33 pounds in Missouri; 33½ pounds in Arkansas and Mississippi; 40 pounds in Florida.

Potatoes, 60 pounds everywhere, except 56 pounds in Maryland.

Sweet potatoes, 46 pounds in Iowa and Dakota; 50 pounds in Ohio, Tennessee, Arkansas, Mississippi, Kansas, Nebraska; 54 pounds in New Jersey; 55 pounds in Alabama; Georgia, Florida, Texas, Kentucky, Indiana, Illinois, Wisconsin; 56 pounds in Maryland, Virginia, Michigan, Missouri; 60 pounds in South Carolina and West Virginia.

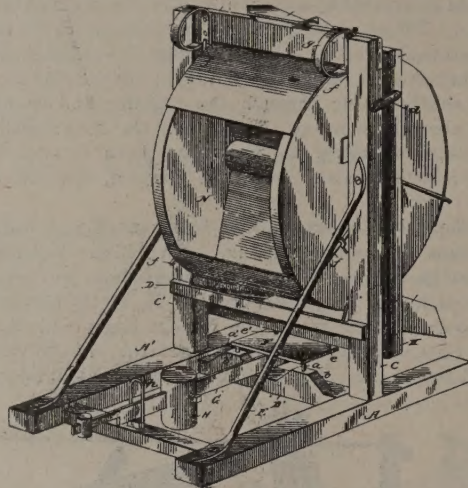
Turnips, 42 pounds in Wisconsin, Missouri; 50 pounds in Connecticut, Tennessee, Montana; 55 pounds in Virginia, Alabama, Georgia, Florida, Texas, Illinois, Kansas, Nebraska; 57 pounds in Arkansas; 58 pounds in Michigan; 60 pounds in Maine, Kentucky and Dakota.

Apples, fresh, 44 pounds Maine; 50 pounds Connecticut, New Jersey, Arkansas; 57 pounds Wisconsin. Dried, 22 pounds Ohio, Michigan; 24 pounds Georgia, Arkansas, Tennessee, Kentucky, Missouri, Illinois, Kansas, Nebraska; 25 pounds New Jersey, West Virginia, Indiana; 26 pounds Alabama, Florida;

28 pounds Virginia, South Carolina, Texas, Wisconsin, Minnesota, Oregon; 48 pounds Iowa.

A NEW ROTATING GRAIN METER.

Edward Gilford of Cowles, Neb., has invented an automatic weighing machine, consisting of a revolving cylinder, as shown in the cut given herewith, and letters patent have been granted to him recently. The cylinder or drum is divided into compartments, and is supported on an upright frame, which is movable. The bottom of the movable frame rests upon one end

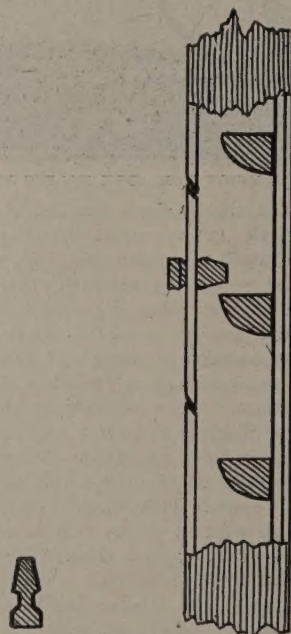


A NEW ROTATING GRAIN METER.

of the scale beam below. On the scale beam is a sliding weight, which can be fastened at any distance from the fulcrum by a set screw. The drum is provided with stops and springs to break the force of contact when the cylinder is brought to rest. The weight of the grain in the compartment depresses the cylinder, causing it to be released and to let the grain discharge. Thereupon the weight on the scale beam by a counter movement elevates the cylinder in readiness to repeat the operation. The absence of complicated mechanism is shown by the illustration.

AN ELEVATOR INDICATOR.

The device shown in the cut given herewith is attached to elevators as an indication of the motion.



AN ELEVATOR INDICATOR.

Sometimes a choke will occur and the belt will stop running without the man in charge discovering the fact until after some time. This attachment will afford the operator a ready means of ascertaining whether or no the belt is running and running properly.

A hole three-eighths of an inch wide is bored through the front of the elevator leg. A piece of belt leather, like shown in cut at left, is inserted in the hole far enough to touch the buckets as they ascend. One end projects out far enough to be easily

visible. The fit should be loose, so the leather can move when struck by the buckets. In case any of the buckets have been torn off the belt the leather will fail to move when that portion of the belt passes, thus informing the operator and showing him where to look for trouble. It costs nothing but the time to cut the leather and bore the hole.

AN UNAPPRECIATED FOOD PRODUCT.

"Rice is, to-day, lower than at any time since 1858, which was the lowest point on record. It is selling at a greater rate than ever, but not nearly so free as would be the case if grocers would give it a chance by handling at something less than piratical profits. Sell at a fair profit and make a quick turn."

The above reason, combined with lack of appreciation on part of the consumer, undoubtedly accounts for the comparatively small amount used per capita in this country. Rice is cheap; the supply is unusually abundant, and it takes first and highest place among food grains suitable for human consumption in its nutritive qualities. As the result of careful investigation and experiments it is found that one pound of rice contains 3.45 per cent. more nutriment than wheat, 3.12 more than corn or rye, and 11.97 per cent. more than oats; in its nutritious, heat-producing, fattening qualities rice takes precedence of all other cereals. When compared with meats, or potatoes, the difference in favor of rice as an article of food is very much greater. A pound of rice yields more than three times as much nutriment as a pound of potatoes, three times as much as lean almost twice as much as fat beef. Dr. Frankland, in his well-known experiments regarding the comparative value of foods, places them in following order of excellence both as to economy and effect: Rice, oatmeal, flour, bread, potatoes and lean beef.

It is easy of digestion, and can be prepared for the table in a great variety of ways. We use, in this country, scarcely 20 per cent. of the amount which we do of the prepared cereals of wheat, corn and oats, and this in the face of these facts demonstrating that rice outranks, in food value, every other of its competitors.—*Merchant's Review*.

PHILADELPHIA'S HAY EXCHANGE.

All the hay handled through the Philadelphia Hay Exchange is, upon arrival, weighed on a track scale and switched into the building. After unloading the car is reweighed and a certificate of weight given, which is official, and also forms the basis for calculating the freight to be collected by the railroad company.

When unloaded the contents of each car are placed in a section separate from all others. Each section bears its own letter or number so that any carload can readily be found for inspection or sale. The hay may be kept in store five days without any charge either for storage or insurance. After the expiration of five days the hay need not be removed but may remain indefinitely, the additional charge being 30 cents per ton for every ten days or fraction thereof. Buyers gather in the exchange every day, the principal receivers of hay having offices in the building itself or in the immediate vicinity. Being centrally located the exchange is convenient as a point of distribution to consumers.

A landscape on the side of a grain of wheat was once painted by the artist D. A. Vr. Meer. When a magnifying glass was brought to bear upon what appeared to be a spot of variegated paint upon the side of the wheat grain all was changed into a beautiful landscape—a forest, a mill at the side of a river, a miller climbing an outside stairway with a sack of grain upon his back; a tall cliff at the side of the mill, and a winding road along which some peasants are trying to drive a refractory pig! Isaac Sanfer of Bucharest, Roumania, has written a letter of 27 words on a grain of wheat, using ordinary ink and pen. The writing can be deciphered with the naked eye. The letter is now in the possession of a citizen of Chicago.

WHO IS A GOOD COMMISSION MAN AND HOW TO SELECT ONE.

The subject above resolves itself into two questions which the hay shipper must ask himself, the first of which can be answered by asking another: "Who can handle my hay best?" and in considering the answer to the second you in reality answer this.

Now as to whether a shipper's results are any better, or more satisfactory, in his consigning to a house that handles only on commission, or to one who handles on commission and buys outright also, is a point on which they must each blow their own trumpet, but we can say with justice to both that where they are both honest, conscientious men, enjoying the same advantages, that, to our idea, in looking at the matter from both parties' sides of the fence that it would be "six of one and a half-dozen of the other," so far as the shipper is concerned, for the reason that the man who handles only on commission claims to have only the interest of the shipper at stake, aside from his stipulated fee for the labor he performs, therefore he is interested in obtaining all that he can for that consigned to him in order to hold his shipper's business. An honest commission man, who may be also a buyer, stands practically in the same position, so far as the commission part of his business is concerned, and if he does not it is soon apparent to the shipper, and a change should be in order. Inasmuch as some shippers prefer to sell outright, to arrive, and are willing, as is usually the case, to take in this way something less than the market price, less the commission and terminal charges, at the time of sale, in order that they may know exactly what they were realizing, their shipments proving what they should be and what they were sold for. This margin in excess of the usual commission is supposed to warrant the buyer in speculating as to the market remaining firm or advancing by the time said purchases may arrive. Should the shipper desire to take the chances on the market himself, his interests are without a doubt carefully protected by the consigning of his hay to be sold on commission, but as to whether a strictly commission house, or one who is also a dealer, or will buy outright to arrive, can better serve the interests of the shipper, we will leave for them to answer.

Who is a good hay commission man and how to select one? A plain, concise and simple answer would be, call upon one who makes it his especial business to sell hay on commission; who has all of the requisite facilities at his command for the expeditious disposition at its full value; who is in good standing among his fellow men and associates, thoroughly reliable and trust-worthy in his business methods as well as financially. Fully posted on the business in which engaged; offers nothing but what he can fulfill, receives a just recompense for that which he does, is prompt in his returns, always gentlemanly and courteous, answers correspondence promptly; whether a prospect for business at that time or not, it may come later. When you find such a one you ought to be satisfied.

Now as a word of caution, we feel called upon to say: Beware of a man who offers more than an article is worth; beware of the man who offers to do something for a stipulation that is not a just or ample recompense for his services: there is either a "nigger in the woodpile," or he is doing business for his health, and not for profit, either of which is dangerous to the shipper. We might also consistently add, beware of the 7x9 man that claims to handle everything that may be sent him, and in doing so, will say, that in the larger centers there is usually enough business to justify the devoting the entire efforts of some house, or a number of houses, to one certain commodity, and there are also large and strong houses who handle several commodities, but they are each presided over by experienced and competent men,

each branch virtually being the same as though they were separate firms, devoting their undivided attention to that special commodity.

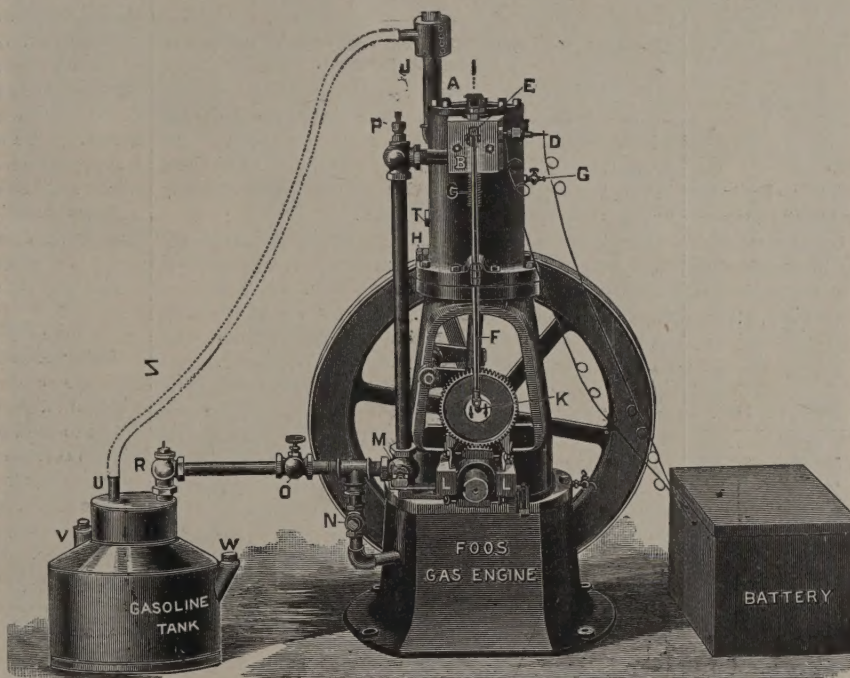
The foregoing, taken from *Hay There*, applies with equal force to all commission men.

A NEW GAS ENGINE.

The remarkable demand for gas, gasoline and oil engines continues unabated, and mechanics continue to invent new engines and improvements on old ones. The demand for these engines for running country grain elevators and warehouses has been greater than for any other purposes. Many have found the gas engines economical and convenient, and they are growing in favor.

In cold weather, or on frosty mornings, it has been found that gasoline does not evaporate readily, and that the air which is drawn over or through the cold liquid does not absorb the amount needed to develop the highest explosive force in the power cylinder. This difficulty has been obviated by the manufacturers of the Foos Gas Engine, which is shown in the illustration given herewith.

Their improvement consists of a warm air tube, shown by the dotted lines in the cut, and a sheet iron drum encircling the hot exhaust pipe at *J*. It only



THE FOOS GAS ENGINE.

requires a moment or two for the exhaust pipe and drum to become hot enough to warm the air. The air passes from the drum down the hose and through the air pipe *U* into the gasoline tank. In warm weather this hose is laid aside as unnecessary. The carburetted air passes out at *R* and through the pipes up into the cylinder, where it is compressed and exploded by an electric spark. To keep the cylinder from overheating and destroying the lubrication it is surrounded by a water jacket. A charge of gas is let into the cylinder at every alternate revolution of the fly wheel. The speed is regulated by a governor on the end of the crank shaft. The battery consists of a number of cells of the Edison-Lalande type, in which the active liquid is composed of a solution of caustic potash in water. The water tank and gasoline tank may be placed outside the building if desired. It is preferable to have the gasoline tank in a warm place.

The Foos Gas Engine is so built that it can be used with manufactured gas, illuminating gas, fuel gas, natural gas, and gasoline either direct from tank or vaporized. The engine is practically noiseless in operation, and is claimed to be the simplest in construction. Horizontal as well as vertical engines are made. It is not necessary to clean the valves every few days. As to the cost of operating, it is claimed that with 74-degree gasoline the quantity used per horse power per hour will not exceed three-quarters to one pint. These engines are built in four different sizes, 2, 4, 6 and 10 horse power.

COST OF PRODUCING HAY AND GRAIN.

Professor Ingersoll, of the Nebraska Experiment Station, records in an official bulletin the results of a practical experiment to find the cost of growing an acre of grain or hay. Fields of from one to thirty-two acres were selected, and every expense was recorded—cost of seed, of labor in planting, cultivating and harvesting. Labor was charged at 15 cents an hour for each man and team, or \$3 per day of ten hours for both. The fields were treated as nearly as possible as by Nebraska farmers. Some of the results are as follows:

	15 acres rye.	32 acres oats.	1 acre wheat.
Cost planting.....	\$63.48	\$ 74.90	\$3.55
Cost cultivating.....			
Cost harvesting.....	64.05	122.65	2.90
Yield per acre.....	21 1-8	34 1-5	33
Cost per bu. in granary..	.39 4-5	.17 7-10	.19 2-5

	28 acres corn.	35 acres clover.
Cost planting.....	\$69.52	
Cost cultivating.....	46.65	
Cost harvesting.....	54.16	\$126.7
Yield per acre.....	40 7-10	2 5-7 tons
Cost per bu. in granary.....	.15	1.32 per ton

The corn crop followed corn or other grain, and a 25 acre field planted on a tough blue grass sod yielded forty-three bushels per acre, but cost over 23 cents a bushel because of the extra labor in fitting the ground. Also, a wheat field with about the same cost yielded forty bushels per acre at a cost of but 16 cents a bushel. Taxes and interest are not counted, as they vary. The labor item is paramount in producing a crop, and that, as shown, increases per bushel as the yield per acre decreases.

RIVER PLATA WHEATS.

Amongst the various River Plata wheats now being offered to British millers there are some very fine parcels of the variety known as Entre Rios.

In one we have procured as a type sample in general appearance and shape somewhat resembles the fine varieties of Mediterranean winter, or perhaps in some degree fine red Lammas; but it is, of course, much harder than either of these varieties.

It is a bright looking, long berried, heavy wheat, of a rich dark red color; in cross section the grains show almost triangular, constituting the main difference in shape from the before-mentioned varieties, and indicating rapid maturing.

The sample is very clean; the impurities do not exceed 1½ per cent. They consist of chaff, black oats, some hard black dirt and occasional smut balls, but the individual grains are not at all contaminated by the latter. It is also sound; sprouted grains are practically absent.

Its weight as received is 63½ pounds per bushel. It is distinctly a hard, strong wheat; the ordinary gluten test showed 33 per cent. of wet gluten; pale in color, very elastic and, so far as we could judge, of good quality.

The wheat is cleaner than most foreign wheats when received, and could be easily dry-cleaned by the ordinary machinery of the screen house, but would no doubt be much improved by judicious washing and conditioning previous to milling.

Judging from our very careful examination, we think the flour yield will be fairly high in quantity and excellent in quality. If carefully milled there should be no difficulty in making 72 to 73 per cent. of clear flour, which should bake into an excellent loaf above the usual standard in strength and color.—*Milling, Liverpool.*

"Old Hutch" says that Pardridge will lose all his money; and the venerable B. Peters Hutchinson ought to know, having gone through the mill himself.

COMMUNICATED

[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

WANTS MICHIGAN WHEAT.

Editor American Elevator and Grain Trade:—I am at present in the market for No. 2 Red, lake shore wheat, raised in Michigan, and would be pleased to hear from elevator men.

Yours truly,
J. H. MILLER.
Sharpsville, Pa.

MORE THAN A DOLLAR'S WORTH.

Editor American Elevator and Grain Trade:—Your May number of the AMERICAN ELEVATOR AND GRAIN TRADE has just reached us and it is a splendid issue. It reminds us that our year's subscription must be nearly out. We have had more than one dollar's worth of information and gratification out of it, and if you think you can "do it over again" you may send us another dollar's worth, for which you will find a greenback inclosed.

Yours truly,
CHAMBERSBURG, PA.
COYLE & DIEHL.

OUR BOSTON LETTER.

Editor American Elevator and Grain Trade:—Dullness has been the chief feature of the market the past month. Jobbers and retailers have bought stuff as they needed it, but have shown no inclination to stock up. Corn has sold as low as 49 cents delivered Boston rate points, and is so low that any strong points would probably start buying.

RECEIPTS FOR MAY.

Articles.	1893.	1892.
Cotton Seed Meal, bushels.....	4,520	4,120
Corn, bushels.....	534,362	272,189
Wheat, bushels.....	771,964	821,276
Oats, bushels.....	418,267	677,532
Rye, bushels.....	1,560	.....
Mill Feed, tons.....	1,496	2,186
Oatmeal, sacks.....	3,336	623
Oatmeal, barrels.....	2,345	4,316
Cornmeal, barrels.....	12,893	11,142
Barley, bushels.....	1,970	6,460
Malt, bushels.....	118,061	211,630
Peas, bushels.....	1,883	7,390
Hops, bales.....	1,023	115
Hay, cars.....	1,174	1,172
Straw, cars.....	62	80
Flour, barrels.....	109,523	117,654
Flour, sacks.....	270,647	139,552

EXPORTS FOR MAY.

Articles.	1893.	1892.
Wheat, bushels.....	504,085	1,032,451
Corn, bushels.....	299,579	23,921
Oats, bushels.....	24,340	239,402
Peas, bushels.....	788	.....
Cornmeal, barrels.....	3,888	4,398
Oatmeal, barrels.....	500	1,364
Oatmeal, sacks.....	3,800	2,483
Flour, barrels.....	32,997	34,381
Flour, sacks.....	176,531	172,283
Mill Feed, tons.....	4,474	not taken
Hay, bales.....	9,126	not taken

J. A. Budd & Co., grain dealers of Wiscasset, Me., have failed.

Yours truly,
BUNKER HILL.

CONFIDENCE IN THE MIDDLEMAN.

Editor American Elevator and Grain Trade:—I do not take your paper, but our grain dealer here does, and he is kind enough to give me the privilege of reading the same. Allow me to say I think it a first-class journal.

I am writing to you because something in the May number interested me, and I thought I would answer the same; it is in regard to the little "piece" credited to the *Progressive Farmer*. All that is said on page 370 is quite true; but why, may I ask, do not more farmers follow the advice given? I am quite certain there is not one farmer in ten in our community who cares to risk shipping his own grain to the Eastern market. Now, perhaps, you ask why? Because they

have confidence in the middleman, whom so many say is "robbing" the "poor farmer."

I will give you an instance of one farmer who was being robbed year after year by these middlemen. In the year of —, when oats were so very low, one farmer came to the middleman and wanted to know what he would give for three cars oats. "Fifteen cents per bushel is the best." "But in Chicago they are worth twenty, so if you won't give me more than fifteen I'll ship them myself." In order to be sure of weights he weighed them when loading. When he got returns some two weeks later it was found he had received seventeen cents "on track," Chicago. You can readily see the "profits." Of course it happened to be to the middleman's interest that the farmer should lose, since one of them had to. I have noticed since then that this farmer allows himself to be "robbed" by the middleman. This is only one instance; I could relate more.

I simply write this to show that the middlemen are not such a bad class after all. Some one will probably think I am a cranky middleman myself, but I assure you I am not. I am only a plain, everyday, go-as-you-please farmer, and uphold the middleman because I am sure of getting fair weights and prices. I neglected to mention that the above farmer lost thirty-five bushels in weight.

Yours truly,
A CONTENTED FARMER.

TRYING TO DRIVE THE COUNTRY DEALER OUT OF BUSINESS.

Editor American Elevator and Grain Trade:—I wish to call your attention to the irregular methods adopted by a commission man in your city to get grain for his firm. The dealers out here are helpless in this matter, but I think the Chicago Board of Trade could and ought to stop his work.

I inclose you a poster and circular, which speak for themselves. This circular has been spread broadcast over this county by the commission man, so that most farmers have read it. He has found a willing tool in the local leader of the farmers' alliance, who has been doing all he can to stir up the farmers against us, and has been advising them to ship their grain to said commission man instead of selling to us. He is so eager to boom the Chicago man's trade that I think he must be getting pay for the work. Some of the farmers whom I had considered my friends have now turned against me and expect to ship all their next crop to Chicago. It looks now as though I shall have plenty of idle time and very little business. I fear it will go hard with the grain dealers as it has with the implement men. There used to be a dealer in farm machinery here, and I did a little in that line myself, but a Chicago firm sent out circulars and catalogues, offering everything the farmer needed at such low prices that the country dealers had to go out of business. Just so it will go with the grain dealers if this Chicago commission house is allowed to keep on.

We look to your journal and the Chicago Board of Trade for redress. These sharks will ruin the whole business, and their success will attract others. Something ought to be done at once to shut them out. They are preparing to do a large business, having circulated not only the poster and circular, but also a handbill printed in three languages.

WESTERN SHIPPER.

GRAIN INSPECTION WAR AT KANSAS CITY.

Editor American Elevator and Grain Trade:—I see in your May number of the AMERICAN ELEVATOR AND GRAIN TRADE an article entitled "Grain Inspection War at Kansas City, Kan.," which is very misleading and was surely written by one who was not much interested in the prosperity of Kansas farmers or Kansas grain men, but had a pecuniary benefit of his own. I will correct a few misstatements and then show you the true inwardness.

First, there has been but one new man put on the inspection force, and he had been acting as a helper for more than a year in the yard, otherwise every deputy who was on the force a year ago is on the force to-day.

Now as to the organization of the Argentine Board of Trade. The laws of the state of Kansas are that cities of the first and second classes can establish Boards of Trade, but unless they have an elevator

within the corporate limits they cannot inspect grain. Argentine has two elevators that have taken out licenses from that Board of Trade, and according to the laws of Kansas it has as much right to inspect grain as the Kansas City Board of Trade.

I will say as to the Kansas grades that we have departments at Atchison, Coffeyville, Winfield and Wichita, and grain inspected at any of these departments is sold on Kansas grades. Now let us see where the shoe pinches. The inspection law of Kansas went into effect March 6, 1891, and from that time until probably February of 1893 an enormous sum of money accumulated in the hands of the Kansas City, Kan., Board of Trade, amounting to \$20,000, and I understand from men who formerly owned stock in the Board of Trade that a \$10 share of stock which was purchased for \$6 with one assessment of \$1 in the meantime, making \$7 the amount of share paid in, netted when a dividend was declared \$50. Each stockholder received this on his one share, but did this benefit the artisan or merchant or doctor who had the interest of his city at heart? Oh! No. When the fellows on the inside found out what was going on they sent their emissaries around and bought out the small holders, and now I am informed that some men own as high as 50 shares each and bought it up before the dividend was declared. I believe the man who contributed the article on the Kansas inspection war was one of these large shareholders, for if he was not he would surely have put his name to the article.

With a bonanza of this kind in sight it would not surprise me if every city of the first and second class did not build elevators and start inspection departments. "We regret to state that the chief inspector is supporting Argentine." To this I will say emphatically, I am not; but if I was I think the world at large would excuse me, for I would be simply getting on the Lord's side.

Respectfully,
KANSAS CITY, KAN. SAM P. JONES,
Kansas State Grain Inspector.

A LETTER FROM C. WOOD DAVIS.

Editor American Elevator and Grain Trade:—Some Chicago gentleman, fearing I should not see your very kind and dignified allusion to me, has been so thoughtful as to send me the inclosed slip, as follows: "Alas! Unless all rumors and indications are unreliable, Pillsbury, the patron saint of the farmer, the godfather of the Anti-Option bill, who wept scalding tears over the low prices farmers got for their grain, has fallen from grace. For it is current gossip on the Chicago Board that Pillsbury, the boss hater of the short seller, was caught short himself a couple of million bushels or some such matter, and had to settle with Cudahy and others who have been boosting the price of wheat. C. Wood Davis will faint dead away when he hears of his collaborer's fall from grace."

I beg leave to inform you that I am not of the kind that "faints dead away" under any circumstances, and am not likely to because a Minneapolis miller has been worsted in a game he seems to be in the habit of playing, or because the editor of an obscure publication has forgotten his good breeding.

Were Mr. Cudahy and others engaged, as you say, in "boosting" the price of wheat? Were they not solely engaged in "boosting" the price of "contracts?" If they had been engaged in "boosting" the price of wheat, wheat would have advanced in the farm markets as well as Chicago, but it neither advanced in Chicago nor in the farm markets, the only thing advancing being the price of contracts.

When the price in the Chicago "contract" market drops, so does real wheat in the country, but when the Cudahys put up the price of "contracts" everyone knows that they control prices and that they will not let it remain up until the farmers can bring their wheat in and tender it. Could not people, were not people permitted to sell that to which they have acquired no shadow of right, there could be no such operations on the part of the Cudahys; Pillsburys would not be forced to hedge their purchases of real grain; the Pardridges would now have more money, and the world would have been saved the recent travesty on commerce and the editor of the AMERICAN ELEVATOR AND GRAIN TRADE would not have exhibited his petty spite.

Yours very truly,
PEOTONE, KAN. C. WOOD DAVIS.

MIDDLEMEN A NECESSITY.

Canadian farmers saw fit to pass the exporters and ship their hay on their own account, which has proved a very unwise step, as it caused an immense quantity of hay to arrive at one and the same time, which overloaded the market, resulting in severe losses to themselves. It seems to be the old story of trying to keep it all, which has been tried so often and has proven disastrous. The natural laws of business seem to be so regulated that it is folly for any one to undertake the handling of this product in this manner. In this case had the farmer consulted the exporter and allowed him to handle his goods, he would have taken no more of them than he could have disposed of to good advantage, which would have maintained a good healthy market. The exporter would have gained a small profit, and the farmer avoided the loss which he was compelled to face by being too ravenous, which in this case shows a loss of several shillings per ton. This, it is fair to presume, would not have occurred had the goods been allowed to go through their legitimate channels.

The same is true not only of the Canadian farmers but of those of the states who at times undertake to market their own goods and pass the dealers in the country as well as the commission man in the city, expecting to reach the consumer direct and save all this margin, which they look upon as being fabulous in amount, and a burden to them, but after a trial or two they find that after the charges of freight and their other expenses are paid out of this fabulous amount, there is very little if anything left. After these trials, as a rule, they are content to sell their goods at home and let the dealer take the chances; who has been taught by custom and experience to take his small profit, or bear his loss without a murmur. That these trials will be made as long as the goods are bought and sold, and the product is raised and consumed, is very evident, for as soon as one set of farmers have undertaken to dispose of their own, and have been disappointed in the results, others will undertake it and be followed by like results.

It seems hard for them to understand that a fish net cannot be made from a single string, or that goods to be handled and sold successfully must go through the established lines and pay the legitimate charges that follow, which are much less than any individual could expect to reduce them to. In the hay trade it is necessary for the dealer in the country to provide for this, in warehouses and appliances for handling goods, and getting his customers in line, which represents to him several thousand dollars. Without this he cannot do business successfully. The commission man selling the goods in the city markets must have his offices and his warehouses, if not of his own that of a terminal company, which in either case must be paid for. He must have his customers to whom he sells, and a vast amount of money to carry on the business. Without these he cannot hold his trade.

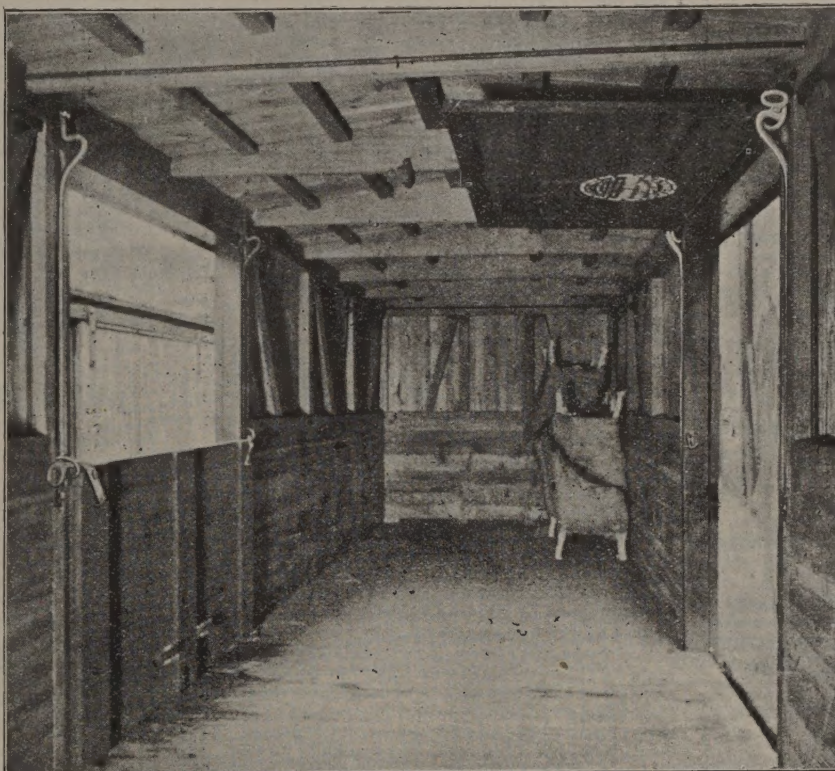
A great deal has been said by the people and the newspapers about the middlemen, whom it has been their ambition to suppress. But any one conversant with the laws of trade must know that the "middlemen," whether located in the country towns or cities, is as necessary for the successful conduct of the trade as oil is to the machinery of the manufacturing establishment. This is evidenced by the fact that there is no important trade in successful operation at the present time without its middlemen, or brokers as they may be termed. In fact, a farmer can be termed a "middleman," as he is the agent to take care of what nature produces, and therefore is as much a

middleman as the legitimate dealer, who is the agent to find the best market for what is produced.—*Hay Trade Journal.*

THE CHICAGO GRAIN DOOR.

Shippers who have often tried to cooper the doors of cars only to have them leak when loaded will appreciate the grain door illustrated herewith, which shows the Chicago Grain Door in its two positions, let down for service and hung up out of the way for loading the car with furniture, hay, etc.

This door does not occupy any of the loading space of the car, does not permit the load to leak out and is easily opened from the outside with a bar or lever. The door can not unhinge, adjusts itself automatically and can be securely hooked up out of the way. Tramps and thieves cannot twist it from place. In its construction steel forgings are used and the castings are malleable, so the company feels perfectly safe in guaranteeing it for five years. The door is on exhibition in the Transportation Building at the World's Fair. The Chicago Grain Door Company, of



THE CHICAGO GRAIN DOOR.

which J. L. Mallory is general manager, has its office in the Rookery Building, Chicago, Ill. Open or closed the door may be fastened securely without danger of loosening. When closed it is tight and completely prevents loss of grain by leakage. When open and hooked to the car roof it cannot be shaken down.

HAY IMPORTS EXCEED EXPORTS.

The report of S. G. Brock, chief of the bureau of statistics, shows that we imported in April 12,161 tons of hay, against 4,162 tons in the preceding April; and that during the ten months ending with April 82,989 tons of hay, valued at \$755,930, was imported, against 64,417 tons, valued at \$552,717, during the corresponding period of 1891-2. Of foreign hay none in the ten months, against 151 tons in the ten months ending with April, 1892.

The exports for April were 2,179 tons hay, against 3,254 tons for April, 1892; and for the ten months ending with April the hay exports were 27,839 tons, valued at \$439,508; compared with 29,210 tons, valued at \$485,857, for the corresponding period of 1891-2.

Broom corn valued at \$11,262 was exported during April, 1892; and during the ten months ending with April \$132,406 was exported, against \$205,956 during the corresponding period of 1891-2.

A DAY ON 'CHANGE.

"No wonder these men die early and suddenly."

The remark came from the lips of a gentleman standing by my side in the gallery of the stock exchange on the memorable day when cordage dragged down men and market, says a writer in the *Pittsburg Dispatch*.

"True enough," replied his companion, as they turned away with a sigh: "I wouldn't go through that strain again for a million!"

The roar of 200 voices welled up from the turbulent mass of men below. Leaning over the rail, I saw men struggling and fighting and gesticulating and shouting and wildly rushing to and fro. Flushed and white faces—arms extended toward heaven as if in despair—fists clinched in imprecation—hands clasped in entreaty. Not singly, but in scores, and in a dozen places at once. Strong men rushed upon these groups and bore down the weak and all caught at each other's throats as if they would tear money from their vitals. Dante must have witnessed such a scene as this when he drew his immortal picture of hell. It was as if we peered into a seething lake of fire and brimstone, and witnessed the torment and heard the wail of the damned! I turned from the sight with a feeling of faintness and disgust. These were but human wolves rending each other for gold.

And I saw around me other men and women packed four deep in the great gallery. In the faces of many of these was the reflected anguish of some of those below. They clung to the rail for hours; and some had eyes bloodshot with weeping and watching, and encircled with dark rings of sleepless nights. There were young men of fashion whose fortunes were involved, and who stared honest work in the face as if it were disgraceful death. Tenderly nurtured women, daughters and wives and mothers, whispered excitedly in each other's ears or looked down upon the scene with drawn faces that indicated the terrible suspense. One bejeweled woman, who had the appearance of one who had just come from some aristocratic function, sat in a chair in the otherwise empty boardroom in a state of collapse. No one paid any attention to her, and as I passed I saw her press her hot eyeballs with her

bediamonded hand. And there were men here with lowering brows and revengeful looks and murder in their hearts. Some cursed the names of those who had involved them in ruin, but silent were those who were most to be pitied. These were the victims of speculation. And many of those who thus suffered in body and mind were really uninjured by the slump in the market. But at that moment many believed this was only the beginning of the end—the forerunner of a grand panic. No man knew where it would end. When cold-blooded operators on the floor lose their heads how can it be expected that investors in the galleries could remain unconcerned? And so it came to pass that in the dread uncertainty of the hour hundreds suffered the pangs of financial ruin who eventually found that they were uninjured.

The exports of seeds for the ten months preceding May 1 included 1,697,150 bushels of flaxseed, valued at \$2,033,949; 7,970,172 pounds of clover seed, valued at \$953,154; 6,495,994 pounds of timothy seed, valued at \$459,570, and 3,845,355 pounds of cotton seed, valued at \$29,454; compared with 3,570 bushels of flaxseed, valued at \$3,865,971; 19,451,018 pounds of clover seed, valued at \$1,627,491; 9,515,166 pounds of timothy seed, valued at \$357,326, and 11,241,583 pounds of cotton seed, valued at \$81,535, for the ten months preceding May 1, 1892.

A SCHEME TO ABOLISH THE COUNTRY BUYER.

A western grain shipper whose letter is published in the "Communications" has sent us some very interesting reading matter that is being circulated in his county by a Chicago grain commission firm. We suppose the same matter has or will be circulated in other counties. One large poster is headed by a picture of two farms separated only by a roadway. On the one side is the prosperous farmer with everything one could wish. He sits in his buggy and sagely advises the unsuccessful farmer, whose place is pictured as being in a wretched state of dilapidation (because he sells his grain at home) to ship direct. Below it is the following:

FARMERS!

SHIP YOUR Grain, Seeds and Live Stock YOURSELVES

instead of selling at home. Secure more money for what you have to sell, get Official State Inspection, Official Board of Trade Weights and Legal Number of Pounds to the Bushel, viz.: 60 lb Wheat, 56 lb Corn and Rye, 48 lb Barley and 32 lb Oats.

AND SAVE THE GRAIN BUYER'S PROFIT

which in many instances amounts to from 10 to 50 per cent., or from Ten to Fifty Dollars per car, sometimes even more. Why should you give at least one-fifth of what you raise annually to some one else?

There is no reason why ninety per cent. of the farmers of the United States should not ship their own products.

Those Who Have Tried It are Highly Satisfied with the Results

and have expressed their intentions to continue doing so.

HOW TO REAP ALL THE BENEFITS FROM YOUR TOIL AND LABOR!

Seek the best market for your products instead of accepting whatever price your local grain buyer offers. In this way the producer and consumer are brought nearer together, and are thus enabled to improve on the methods practiced by their forefathers.

Keep yourself posted through the newspapers regarding the Chicago markets, and learn from your local station agent what it will cost to get your grain to Chicago; add to that one cent per bushel, our commission for selling, and deduct this total cost for freight and commission from the price in Chicago. By comparing this with what you get at home you can tell whether it will pay to ship or not.

Farmers, help each other in hauling your grain to the station and thus avoid detaining the car too long. Be sure to clean your grain well, and keep good and poor grades separate. Don't mix them, as it would thus cause the whole to be graded by the inspectors as low as the poorest. Avoid shipping different grades in the same car, but if you must, then build bulkhead between. Do not attempt to mix or cover poor grain with good, as this invariably causes low inspection. Carefully follow these instructions and we can obtain better prices for your property. We are already handling the grain for hundreds of farmers.

We secure the *highest market price possible* and make prompt returns. Give us a trial and we believe you will continue shipping to us. When you are ready to ship, order a car from your local agent, load it and have him bill it to us, then advise us by mail of shipment, giving car number, so we can give your property proper attention upon arrival, and we will do the rest.

We are the first and only Board of Trade Commission House to seek farmers' trade direct, and aim to study their interests in every way possible.

We want your patronage and assistance to make this new departure a success. With your help we can make ours the largest grain house in the world, which would exert a powerful influence beneficial to the farmer.

The following extracts are from a few of many hundreds of letters received from some of those who have tried shipping their grain to us. Why should you not do likewise? Try it. It will pay you.

HAIGLER, Neb., March 6, 1893.

Messrs. ———, Chicago, Ill.—Gentlemen:—You have my thanks for your services in selling my car of wheat that I shipped to you February 3, and received

your check the first of March for \$271.87. My net gain over and above the then paying market price here was about \$56.65. Looks to me like I was well paid for cleaning my wheat and shoveling it into the car. I wish you much success, and remain
Yours very truly,
LEWIS JACOBSON.

P. S.—I think you will receive two or more cars of wheat from St. Francis, Kans. I told Taylor and Niswanger, and one man Fredrickson, to be sure and ship their wheat to you, and I believe they will unless the grain buyers buy them out in their attempt.

BROWNSDALE, Minn., March 15, 1893.

Messrs. ———, Chicago, Ill.—Gentlemen:—Your letter with draft or check for \$351.70 and account of weights and sale of barley were duly received. You can rest assured that I am well pleased with the result, and think you did well in selling as high as you did. I am satisfied that by shipping to you I have cleared ten cents per bushel, or \$83.75 on my car.

I sold most of my barley in fall to buyers here, but will not do so next fall. You can expect a good business next fall from this station. I may ship you a car of oats in May or June.

Yours truly,
CHARLES GAGE.

BERTRAND, Neb., March 25, 1893.

Messrs. ———, Chicago, Ill.—Gentlemen:—I received your report on my car of wheat. Am very well pleased with the sale and returns. This was a very profitable deal for me, and you will probably hear from me again. I was only offered 40 cents here for the wheat you sold for me in Chicago at 73 cents; the freight, commissions and other charges amounted to 19 cents a bushel, which, added to what I was bid at home, made it cost me in Chicago 59 cents, and your securing 73 cents for me makes it net me 14 cents a bushel profit, or \$97.73 gain on the car.

I expect to ship two cars of corn about the first of June.

Very respectfully yours,

F. A. MORGAN.

M. Newinger, Dix, Neb., gained 14 cents a bushel on 788.20 bushels wheat, which equals \$110.36.

William Bohle, Rock Branch, Ia., gained 11 cents per bushel on 650 bushels barley, which equals \$71.50.

B. T. Wright, Wauneta, Neb., gained 94 cents per bushel on 671 bushels wheat, which equals \$63.74.

J. W. Norris, Phelps Center, Neb., gained 7½ cents per bushel on 695 bushels wheat, which equals \$52.12.

Jos. Koenig, Carns, Neb., gained 7 cents per bushel on 611 bushels of wheat, which equals \$42.77.

J. A. Shores, Westerville, Neb., gained 6½ cents per bushel on 514 bushels wheat, which equals \$33.40.

William Bohle, Rock Branch, Ia., gained 6 cents per bushel on 595 bushels barley, which equals \$35.70.

A. E. Joiner, Emerald Grove, Wis., gained 5½ cents per bushel on 904 bushels barley, which equals \$49.72.

Farmers also gain many dollars on every car in the difference between the number of pounds per bushel in Chicago and the number of pounds taken for a bushel by the home grain buyer.

From the "Western Rural and American Stockman":—"That farmers may know to whom they can consign their grain with confidence and the certainty of getting good prices and prompt returns *The Rural* calls attention to the advertisement of Messrs. ———, commission merchants of ———. This firm are well known to *The Rural*, and are perfectly responsible, and our readers can ship their grain to them with perfect confidence.

It seems strange that farmers in disposing of their grain will continue to haul it to the nearest station and accept whatever price the local grain buyer chooses to offer for it, when they can just as well ship it themselves to the primary market, securing all there is in it themselves, saving the grain buyer's profit, eliminating several middlemen, the producer and consumer thus coming closer together. One of the plans this paper has been for years advocating for the betterment of the agriculturist.

PATRONS OF INDUSTRY OF NORTH AMERICA, STATE OF ILLINOIS.

OFFICE OF THE GRAND VICE-PRESIDENT, }
ORANGEVILLE, ILL., Jan. 2, 1892. }

Messrs. ———, Chicago, Ill.—Dear Sirs:—Yours of the 30th at hand, inclosing check for \$292, for which please accept thanks. I am very well satisfied that farmers can be profited by shipping their own grain. Do you sell live stock? Wishing you a Happy New Year, I remain
Yours truly,

F. B. RAYMOND.

We are in receipt of hundreds of letters equally as flattering, but lack of space prevents using them.

Write our references, and when you are satisfied that we are good, then ship your grain to us with confidence.

Whenever you visit our city we would be pleased to have you call at our office and make our personal acquaintance, and you will be given an opportunity to visit the Board of Trade and can see for yourselves how your grain is sold. Letters of inquiry cheerfully answered. For any further information address

Commission Merchants, Chicago.

Special Notice.—Every farmer should own his own scale; it will more than save its cost every year.

Illustrated price list of scales furnished upon application.

References: Corn Exchange Bank, Chicago; Northern Trust Co. Bank, Chicago; Union National Bank, Chicago; Armour & Co., Packers, Chicago; O. A. Thorp & Co., Exporters, Chicago; First National Bank, Charter Oak, Ia.; First Bank of Anselmo, Anselmo, Neb.; Hon. Milton George, Pres. of Illinois Farmers' Alliance, Chicago, and hundreds of others.

This poster is accompanied by a circular letter and a handbill printed in three languages. One page bears a number of testimonial letters claimed to have been received from farmers who consigned grain to the "well-known commission firm." It also bears the following:

"Farmers! Ship your grain to us yourselves instead of selling it at home, and save the grain buyer's profit. See by the following letters what a few farmers say of the hundreds who have tried it. Why don't you try it and see what you can save."

The front page contains the following instructions to farmers how to ship their own grain:

"Having received many inquiries from farmers about how to ship their own grain, etc., and finding it impossible, owing to their great number, to answer each one individually as fully as we would like, we have concluded to get up a general letter, covering, as far as possible, the many points raised, trusting that we can in this way give them all the information they desire. Should there be anything further, however, that they would like to know, we will cheerfully answer their inquiries.

"These instructions are only intended for the guidance of those who have never had any experience in shipping.

"In shipping your grain to Chicago you not only save your home grain buyer's profit, but give only the legal number of pounds to the bushel, namely, 60 pounds of wheat, 56 pounds of corn, 56 pounds of rye, 48 pounds of barley, and 32 pounds of oats, which in many cases will prove a saving of several pounds on every bushel, which on your year's crop would amount to a great many bushels.

"It is always best to clean your grain well when possible, as you thus avoid paying freight on dirt, and also help it to inspect into a better grade. Of course the grain when shipped should be dry and in good condition, so it will not heat or become spoiled en route. Only load one kind of grain in a car.

"When ready to ship order a car from your local railroad agent, informing him how much grain you would like to ship, so he will know the size car to order. Be sure to put in the car at least their 'minimum' weight. Examine the car before loading it, being sure there are no leaks in the roof, floor or doors. Also see that the car is swept out clean.

"When car is loaded have your railroad agent bill it to Chicago, Ill. Then you should advise us by mail, *giving car number*, so that we may know to whom it belongs, and give it proper attention upon arrival, i. e., looking after its inspection, sampling, etc. (We will then sell it to the very best advantage, endeavoring to obtain the highest market price possible, and remit the proceeds promptly when sold and collected for.)

"Cost of shipping.—Your local railroad agent will give you the rate of freight per 100 pounds on any kind of grain from your station to Chicago. Multiply this rate by the number of pounds in a bushel of that kind of grain and it will give you the number of cents per bushel it costs to lay that grain down in Chicago, for example: If the rate of freight on wheat from your station to Chicago is 14 cents per 100 pounds, multiply 14 by 60 (the number of pounds of wheat to a bushel), and you have 14x60=8.40 or eight and four tenths of a cent per bushel for freight; deduct this and our commissions (which are 1 cent per bushel) from what that grain is worth in Chicago, and it will show you whether it will pay you to ship or not.

"The Interstate Commerce Law prohibits discrimination in freights and you are entitled to the same rates and to cars whenever you want them just the same as the largest shipper, and in case you cannot secure at your station what you are entitled to, write us and we will take it up to headquarters for you.

"We have many inquiries about what grain 'ought to be worth when it arrives in Chicago, say two weeks hence, etc., etc.' We make no pretense of being prophets; we never buy grain ourselves or speculate, but sell grain upon arrival for the best price we can possibly obtain, handling it as well and as carefully as if it was our own, and can only refer inquirers to *Market Report*, *Weekly Market Reviews*, and other commercial papers, and their own good judgment, to guide them as to when is the best time to sell, etc. We believe however, that farmers, as a rule, do better to sell their grain when it is ready for market, unless for some reason the markets are unduly depressed—in which case, if they have facilities for carrying it a short time, it might pay them to do so until the period of extreme depression is over, but our experience of twenty-five years in the commission business has been that it does not pay the farmer to speculate too much through holding his grain an unreasonable length of time after it is ready for the market.

"Some farmers, owing to their inexperience in such

matters, doubtless think that shipping their grain *way off to Chicago* is a very risky undertaking—but such is not the case at all. The railroad business is so systemized that your grain is more safe and as sure of reaching us as a letter, and you can easily find out about us by investigating our references. We have been on the Board of Trade for 25 years, and you can consign your grain to our care with just as much certainty of getting your money for it as if you sold it at home. *What is necessary is that you have confidence.* Make the first trial and you will surely never return to the old methods of selling your grain at home. We predict that inside of five years nine-tenths of the farmers of the United States will ship their own grain instead of selling it at home, thus revolutionizing the present methods of the grain business.

"Whenever we can serve you in any way do not hesitate to command us.

"In giving your address be sure and sign your name, postoffice, county and state very plainly.

COMMISSION MERCHANTS.

"Chicago."

ROPE DRIVES.

Transmitting power by manilla rope drives has been put in use in many establishments, and, as a rule, has given excellent satisfaction. A leading firm which has installed many rope drives makes the following claims for its superiority: "Rope drives are positive. The automatic tension carriage takes up the slack, and as the strain is put on the rope, the rope will bed itself into the groove of the wheel instead of slipping, as often occurs on a belt pulley. Another advantage of the rope drive is, that it is very compact, taking up much less space than belts. It can be run around corners and carried into almost any place or position, thus often effecting a large saving where gears would have to be used. It is perfectly noiseless and has also this advantage, that it is not affected if the shaft is slightly out of line, but will adjust itself to uneven conditions of the shaft when they are not too pronounced."

BUFFALO'S GRAIN-HANDLING RECORD.

The *Buffalo Express* says: In spite of some misgivings at home and no little uncomplimentary prophecy at other lake ports, the harbor elevator system has acquitted itself remarkably well in taking care of the great Chicago grain fleet. People who are eager to believe that there is more elevator capacity here than is needed should not fail to make a note of this performance. They are, at the same time, welcome to note the amount of actual storage capacity not in use. There will be small satisfaction for malcontents and envious rivals in either case. If they are obliged to fall back on the single complaint that Buffalo is charging too much for handling grain, there is nothing in the world to prevent them from building elevators and operating them at reduced rates.

This invitation is not given by way of bravado. It is a plain statement of the case as it appears to unbiased observers. When the entire situation here is taken into account—the great fluctuation in grain receipts, the fact that to have elevator capacity enough at all times there must be too much for a great part of the time, the further fact that in order to meet the peculiar needs of an impoverished and not very well managed canal there is need of elevators to run at cut rates—all these considerations contribute to a showing for Buffalo harbor which could not well be bettered. There is no other port in the world that can begin to acquit itself in this regard as the port of Buffalo has done.

Souvenir guides to the World's Columbian Exposition and Chicago free to grain dealers at the office of the AMERICAN ELEVATOR AND GRAIN TRADE, Room 5, 184 Dearborn street, Chicago.

The visible supply of grain and flour in the state of California, as reported by T. C. Friedlander, secretary of the San Francisco Produce Exchange, on June 1 was 4,485,923 centsals wheat, 1,309,102 centsals barley, 57,240 centsals oats, 9,725 centsals rye and 83,327 barrels flour; against 2,100,149 centsals wheat, 913,049 centsals barley, 48,786 centsals oats, 5,831 centsals rye and 120,517 barrels flour, on June 1 last year, and 1,626,562 centsals wheat, 352,882 centsals barley, 45,074 centsals oats, 14,136 centsals rye and 121,166 barrels flour, on June 1, 1891.

CLEAN BILLS OF LADING FOR GRAIN.

The shortage on shipments of bulk grain which has for the past year or two been agitating the minds of Western growers has, in Kansas, found expression in a bill enacted by the legislature, that requires railroad track scales at all stations where the aggregate shipments of grain in 1892 amounted to one hundred or more cars, and thereafter to supply track scales at other stations each year where, during the preceding calendar year, one hundred or more cars of grain shall be shipped. It also requires that from and after that date all grain shipments shall be weighed by the railroad companies on such scales, and that grain bills of lading, instead of being for an estimated quantity (more or less) shall recite the exact weight as determined by the scales; which bill of lading shall be conclusive proof of the amount of grain received by the company.

Although the bill on its face is absurd in some particulars and impossible of operation in others, says the *Railway Review*, it nevertheless voices a demand that has in it the elements of justice and correct commercial practice, and will therefore in some form eventually prevail. Railroad companies as common carriers are compelled to forward whatever is offered for shipment if in transportable form and condition. Commercial usage has established that grain in bulk complies with such conditions, subject only to such limitations as may be proper in connection therewith, such as quantity, condition, etc., concerning which reasonable regulations may be made. But under such regulations common carriers, whether by rail or water, must deliver in their entirety all shipments delivered to them or be responsible for the difference.

In the rapid development of the Western country the proper adjustment of the relations between carriers and their patrons did not, and in the nature of things could not, keep pace with the requirements of transportation, but it was much better for all concerned that commerce should move rather than that it should be delayed until all of these relations could be perfectly adjusted. In no one particular was this more necessary than in the movement of grain, and the usual plan adopted by the roads of encouraging the construction of private elevators, to be operated by dealers, was undoubtedly the best that under the circumstances could have been chosen. Although this practically put into the hands of these buyers the control of grain shipments, to the exclusion of the growers, it was a necessity under the circumstances, and, all things considered, was an equitable arrangement.

With the development of the country, however, and the natural opposition of the American people to anything that denies their freedom of choice, came a demand for relief from this monopolistic method, and the track buyer is introduced. This was soon found to be absolutely detrimental to all parties except the buyer, and as a consequence there is an almost universal demand for such facilities as will enable growers to ship their own products in carloads on equal terms and with equal facilities as is possessed by the proprietor of the local elevator. And it is in response to this demand that the bill referred to has been enacted by the Kansas legislature.

It is not proposed to discuss herein the terms of the Kansas law, but only to direct the attention of the railroads to the fact that what the Kansas law endeavors to do must in some way be accomplished, and to suggest that if voluntarily done by the railroads, it will, owing to their knowledge of the requirements in the case, be more just to the shippers on the one hand and less burdensome to the railroads on the other than if adopted in conformity to the requirements of a law enacted by legislators wholly ignorant of the subject. The subject will require careful study in order that the best method for the accomplishment of this end may be determined; but whatever the method, three things are necessary. The local buyer must be encouraged in order that a local market may be sustained at each shipping point; such shipping facilities must be supplied that will relieve the grower from the necessity of selling to the local buyer by enabling him to ship on equal terms; and track shipments must be eliminated so that railroad equipment may be used to the

best advantage and not employed as warehouses for the benefit of temporary buyers.

It is probable that throughout the western states all stations having sufficient business to demand elevator facilities are already supplied, and it is also probable that most, if not all, the proprietors of such elevators would be glad to turn them over to the railroad companies at less than cost, or at least to make such an arrangement with the railroad companies as to enable them to handle growers' shipments in carload lots at a minimum cost. It will be contended, and probably with truth, that at present rates the railroads cannot afford to incur such an expense, but like many other things in this age of legislative experiment, that isn't the question. The agitation concerning clean bills of lading is on. Its fundamental principle is correct. The question is, which will cost the most, to delay action until required by law to adopt burdensome and costly methods, or forestall such action by furnishing as soon as possible facilities that will best answer the demand?



Issued on May 16, 1893.

AUTOMATIC GRAIN MEASURER.—John E. Buxton, Owatonna, Minn. (No model.) No. 497,424. Serial No. 433,794. Filed May 21, 1892.

WASHER, DRIER AND SEPARATOR.—George H. Tench, Pottsville, Pa. (No model.) No. 497,615. Serial No. 452,447. Filed Nov. 18, 1892.

Issued on May 23, 1893.

BALING PRESS.—George Schubert, Walnut, Tex. (No model.) No. 498,032. Serial No. 458,362. Filed Jan. 13, 1893.

WAGON DUMP AND ELEVATOR.—John S. Kidd, Des Moines, Ia. Reissue, No. 11,340. Serial No. 393,238. Original No. 447,190, dated Feb. 24, 1891. Filed May 19, 1891.

Issued on May 30, 1893.

DRIVE CHAIN LINK.—Josiah S. Carter, New Britain, Conn. (No model.) No. 498,233. Serial No. 417,453. Filed Jan. 9, 1892.

GRAIN SEPARATOR.—Henry Hamper, Greenville, Mich. (No model.) No. 498,388. Serial No. 450,240. Filed Oct. 28, 1892.

CAR MOVER.—Frederick Mertsheimer, Cheyenne, Wyo. (No model.) No. 498,521. Serial No. 461,960. Filed Feb. 11, 1893.

GAS ENGINE.—Cicero V. Walls, Arcola, Ill. (No model.) No. 498,700. Serial No. 424,202. Filed March 8, 1892.

GAS ENGINE.—Samuel Lawson, assignor to himself and Alonzo T. Welch, same place. (No model.) No. 498,476. Serial No. 407,499. Filed Oct. 2, 1891.

COMBINED GRAIN HULLER, SCOURER AND POLISHER.—Bernhard E. Fischer, Defiance, O. (No model.) No. 498,510. Serial No. 437,093. Filed June 17, 1892.

GRAIN STEAMER AND DRIER.—George Y. Smith, Minneapolis, Minn., assignor of one-half to Fred G. Atkinson, same place. (No model.) No. 498,731. Serial No. 430,934. Filed April 27, 1892.

Issued on June 6, 1893.

BALING MACHINE.—John C. F. Cornelius, El Dorado, Kan. (No model.) No. 498,953. Serial No. 440,792. Filed July 21, 1892.

SPIRAL CONVEYOR.—Benjamin F. Radford, Hyde Park, Mass. (No model.) No. 499,175. Serial No. 446,016. Filed Sept. 15, 1892.

CORN SPLITTING MACHINE.—Robert E. Poindexter, Indianapolis, Ind. (No model.) No. 498,887. Serial No. 441,652. Filed July 30, 1892.

BALING PRESS.—George W. Driggs, Elyria, O., assignor of one-half to Moses Beal, same place. (No model.) No. 498,845. Serial No. 439,696. Filed July 11, 1892.

FEED MECHANISM FOR GRINDING MILLS.—Henry H. Ring, Lairdsville, assignor to Sprout, Waldron & Co., Muncy, Pa. (No model.) No. 499,145. Serial No. 460,748. Filed Feb. 2, 1893.

Beef and hog products valued at \$65,099,402 were exported during the seven months ending with May, against \$74,289,191 during the corresponding period of 1891-2.

CROP : CONDITIONS.

SOUTH DAKOTA, June 10.—The wheat acreage in South Dakota has decreased 9 per cent., while the flax acreage has increased as much as 146 per cent.

TEXAS, BONHAM, FANNIN Co., June 8.—Wheat, corn and oats are in good condition and the acreage is large. The stocks of corn are average, of wheat and oats small. **BONHAM HAY FARM Co.**

KANSAS, CALDWELL, SUMNER Co., June 12.—All our crops are in poor condition. The wheat, corn and oats acreage is an average; the rye and barley acreage is small. Small stocks are on hand.

IOWA, APLINGTON, BUTLER Co., June 12.—Corn and oats are in good condition, with an average acreage of each. Average stocks of corn and small stocks of oats are on hand. **H. DREYER & Co.**

NORTH DAKOTA, LISBON, RANSOM Co., June 12.—Crops in this locality are far ahead of last year at this time, and as we never have a failure we are looking for a big harvest. **W. D. PALMETIER.**

MISSOURI, EVERTON, DADE Co., June 8.—Wheat is in fair condition, corn good, and oats poor. The wheat and corn acreage is large, the oats acreage small. Small stocks are on hand. **J. E. GYLES.**

MICHIGAN, ARMADA, MACOMB Co., June 2.—Wheat is in good and oats in fair condition. The acreage of wheat is an average and that of corn large. Average stocks of wheat and small stocks of oats are on hand.

MANITOBA, GREY, MANCHESTER Co., May 29.—Oats have just been sowed, and barley is being sowed. The acreage of oats is large, of barley is average. The spring wheat acreage will be small. **J. P. FRISSEN & Son.**

MISSOURI.—Wheat is all headed out. Some is short and some is long. They had too much rain for a good crop. The shortage varies from 25 to 50 per cent, as compared with last year. Probably 60 per cent. is a conservative estimate.

KENTUCKY, BRUMFIELD, BOYLE Co., June 12.—Corn is poor; oats, wheat, rye and barley are good. A large acreage is in wheat and corn, a small acreage in rye. Stocks of wheat and corn are large, of oats and rye small. **G. A. STEWART.**

OREGON, ALSEA, BENTON Co., June 3.—Crops are in average condition. The acreage of oats is large, of wheat, corn, rye and barley small. Average stocks of wheat and small stocks of other grains are on hand. **C. C. CHANDLER.**

CALIFORNIA, BAKERSFIELD, KERN Co., May 29.—The condition of the growing wheat, oats, rye and barley is average, of corn good. The acreage of oats and rye is small, of wheat, corn and barley average. Stocks on hand are small.

NORTH DAKOTA, GLASSTON, PEMBINA Co., June 12.—Wheat is fair, oats average, rye good and barley average in condition. The acreage of wheat and barley is small, of oats and rye large. Small stocks of each are on hand. **McCABE Bros.**

IDAHO, BLACKFOOT, BINGHAM Co., May 29.—The condition of our wheat, oats and barley is good, and the acreage is an average one. Small stocks of wheat and oats and no corn, rye or barley on hand. **HOPKINS LUMBER & MILLING COMPANY.**

MISSOURI, ENON, MONITEAU Co., June 8.—The growing wheat is in fine condition; corn is poor, and oats average. The acreage of wheat and oats is an average, of corn small. The stocks of corn are average, of wheat and oats small. **J. McDOWELL.**

TENNESSEE, CLEMENTSVILLE, CLAY Co., May 28.—Corn and rye are in good condition, wheat and oats fair. The acreage of corn is large, of wheat average and oats and rye small. No oats or rye and small stocks of wheat and corn are on hand. **JNO. S. MORROW.**

KANSAS, CEDARVILLE, SMITH Co., June 8.—Corn is in good condition, wheat, oats, rye and barley poor. The corn acreage is large, wheat acreage average, and oats, rye and barley acreage small. Average stocks of corn and small stocks of wheat, oats, rye and barley are on hand.

COLORADO, EVANS, WELD Co., May 29.—Wheat, corn and barley are in average condition, and oats in poor condition. We have an average acreage of wheat, corn and barley and a small acreage of oats. Small stocks of wheat, corn, oats and rye and average stocks of barley are on hand.

OHIO, HIGHLAND, HIGHLAND Co., June 2.—Wheat, rye and barley are in good condition, corn average and oats fair. The acreage of wheat and corn large and that of oats, rye and barley small. Large stocks of wheat and small stocks of corn, oats, rye and barley are on hand. **A. WILLIAMSON.**

KANSAS, CLIFTON, WASHINGTON Co., May 24.—We are having extremely dry weather in this vicinity. Not enough rain has fallen this spring to wet plowed ground two inches deep. Wheat is a total failure. Oats is heading out and is not four inches high. Farmers say the oats will be so low that it can not be cut. Corn is coming up nicely where it was planted

deep enough, but where it was not they are replanting. Take it as a whole the outlook is bad. **MURDOCK GRAIN COMPANY.**

MICHIGAN, BELLEVUE, EATON Co., June 1.—Wheat is in poor condition; corn and oats are average; rye fair and barley poor. The acreage of wheat, corn and oats is an average, of rye and barley small. Average stocks of corn and oats and small stocks of wheat, rye and barley are on hand. **J. R. HALL.**

IOWA, AGENCY, WAPELLO Co., June 12.—The condition of the growing grains are as follows: wheat, good to average; corn, good to fair; oats, average to fair; and rye fair. The acreage is bigger and the stocks on hand are small. The prospect for a big crop is the best it has been for ten years. **JOHN FULLEN.**

IOWA, ASPINWALL, CRAWFORD Co., June 12.—Wheat, oats and barley are in good condition. There is no winter wheat here. The acreage of wheat is small, of corn large and of oats, rye and barley average. Small stocks of wheat, oats and barley, large stocks of corn and average stocks of rye are on hand. **M. SCHACHT.**

CORN IN OHIO.—Corn planting in Ohio is a little late. It rained in the northern portion of the state almost every day for the last six weeks up to the opening of the present week, but the land has been drying out rapidly this week, and Saturday night will see the crop in the ground. The oats crop looks well and has made rapid growth this week.

TEXAS, BELTON, BELL Co., June 9.—This immediate section suffered from rust in oats, now in wheat. Oats are in fair condition, wheat average and corn good. In the northern part of the state oats and other grains are in splendid condition. The acreage of corn and oats is large, of wheat average. Stocks of corn are large, of wheat small, with no old wheat or oats on hand. **A. HODGE.**

MINNESOTA.—In Minnesota the prospects for spring wheat are about the same as they were a year ago, except that the crop was put in so late this season that when the warm weather struck it it shot right up straight without stooling as it should, and the indications are that the yield will be light in consequence. The general opinion seems to be that there has been more diversity of crop this season than is usual in Minnesota.

WINTER WHEAT IN SOUTHERN ILLINOIS.—There will not be any wheat cut before the first week in July. It is heading out long and short and more or less of it is not yet headed at all. The ground is still wet, and wheat on low spots is suffering. Some of the best counties in Southern Illinois do not expect more than half as much wheat as they had a year ago. Some go as far as to say that considerable of the late wheat will not make anything better than "chicken feed."

KANSAS.—Secretary Mohler, in his crop report, puts the Kansas yield of wheat at 33 per cent of a full crop, or a total yield of about 25,000,000 bushels. The area planted to corn this season, as compared with that of last year, is placed at 107 per cent. The increase was chiefly due to failure of wheat. The area being planted to corn this year will be further increased by planting still more wheat land to corn. The average condition of oats for the eastern belt is reported at 89 per cent., for the central belt 41 per cent. and the western belt 40 per cent.

CORN IN ILLINOIS.—In Central and Northern Illinois corn planting is finished. The stand is generally fair. There has been some replanting done, but not any more than usual. The early planting is from two to four inches high. There is about 25 to 30 per cent. of the old corn in farmers' hands. On all tilled land farmers are cultivating their corn and the fields are generally clean. Though the cold, cloudy weather kept corn back it had an excellent effect upon the oats and the general condition of the crop in these areas never was better at this time of the year.

THE DAKOTAS.—The general prospects for a crop of spring wheat through the Red River Valley are fairly favorable. This includes a large area of the country in North Dakota. The wheat is coming up evenly and has a healthy color. Of course there are some areas which have been flooded by high waters this spring on which no crop will be grown, and this has decreased the area sown to grain to a considerable extent. The weather has been cold for the time of year, which has retarded the rapid growth of the crops, and the wheat is about ten days later than in an average year. In South Dakota the general prospects for spring wheat, as compared with last year, show it to be fully three weeks later, much thinner on the ground, and weeds starting rapidly. There is more barley and flax sown this season than there was last.

KENTUCKY.—State Commissioner of Agriculture McDowell in his monthly crop report issued to-day says the continuation of wet weather throughout the month of May has been discouraging to farmers, the deficiency of sunshine and excessive rainfall having greatly interfered with the proper cultivation of crops. He places the percentage of wheat at 95. Wet weather has retarded the planting of corn; the part planted is reported as looking well, but weedy and needing work; percentage 94. The rye crop is small in acreage but fine; percentage 99. The oat crop is

in encouraging condition; percentage 97. The prospect for clover is excellent, percentage 104. Timothy in acreage and condition 94 per cent. Rainy weather has greatly interfered with the transplanting of tobacco; the plants are in a healthy condition, however, and largely above the average; the percentage in acreage is 102, condition 94.

MICHIGAN.—The Michigan crop report for May, issued to-day from the office of the secretary of state, says that the outlook for wheat on May 1 was not as promising as one month earlier. It is now estimated that 5 per cent. of the acreage sowed will be plowed up because winter killed or otherwise destroyed. The average condition in the southern counties is 73 per cent., in the central 79 per cent. and in the northern 83 per cent. of the vitality and growth of average years. Compared with April 1, the decline in the southern counties is 8 per cent., in the central 12 per cent. and in the northern 10 per cent. This decline, however, is due to the fact that the extent of injury could be better estimated May 1 than on April 1 rather than to actual damage to the crop during April. The weather during April was cool and wet and neither wheat nor grass made the usual growth in this month. In their general remarks, correspondents in the southern counties, almost without exception, report wheat in bad condition. The fields are spotted, large areas being killed out by ice, wind and water. Insects have done much damage. The total number of bushels of wheat reported marketed by farmers in April is 811,348. The total number of bushels of wheat reported marketed in the nine months, August to April, is 12,341,618, which is 1,030,834 bushels less than reported marketed in the same months last year.

OHIO.—The June report of the Ohio State Board of Agriculture reports the conditions of leading crops in comparison with a full average position or prospect as follows: Wheat 87, rye 88, barley 84, oats 85, clover 89, timothy 89. Hogs, to be fed for summer markets, 42 per cent. Spring pigs, saved in comparison with a full average, 82 per cent.; lambs, number saved, 87 per cent. The report says: Wheat was very late and backward, but is now making rapid growth, and some fields are becoming very rank, and unless the weather is decidedly favorable from now until harvest much of it will be lodged. The principal damage by rains and floods has been to the wheat on low and poorly drained ground. Some fields on such ground have been about ruined, the stalk rotting at the ground, while other fields are yellow, spotted and badly drowned out. On uplands and land well drained the wheat is promising. In the southern part of the state it is heading out and much of it promises a full average. Oats will be short of an average acreage by reason of farmers not being able to seed. The condition of the plant, where not drowned out, is fairly good and healthy and is now making rapid growth. Corn is very late in being planted. At time of this report there was considerable yet to be planted, but with favorable weather it was expected that the planting would be completed throughout the state within a few days. Some corn has been planted a second time. Corn that is up has not made rapid growth, and from many correspondents come reports of the cut worm at work. While the acreage will be about a usual average, it will require favorable weather during the growing season to make the crop an average one in production.

GOVERNMENT CROP REPORT.—The report of the Department of Agriculture, makes the acreage of winter wheat as compared with that of last year 87.88, being a reduction of 12.2 points. The states in which the principal decrease has occurred are Illinois, Missouri, Kansas and California. The reduction of the acreage in the states of Kansas, Missouri and Illinois was caused in the main by the long continued drought and extremely cold weather. A vast amount of the acreage sown has been plowed up and put to other crops. The decrease from the acreage of 1892 is: in the state of Illinois, 24 points; in Missouri, 16 points; in Kansas, 39 points. The percentage for the country of spring wheat area is 94. The percentages of the principal spring wheat states are: Minnesota, 90; Nebraska, 100; South Dakota, 95; North Dakota, 96.

The condition of winter wheat has improved but slightly since last report, being 75.5 against 75.3 for the month of May. The percentages of the principal states are respectively: Ohio, 90; Michigan, 72; Indiana, 81; Illinois, 67; Missouri, 74; Kansas, 47. The condition of spring wheat presents an average for the entire country of 86.4, and for the principal spring wheat states as follows: Nebraska, 65; Missouri, 89; Minnesota, 88; Iowa, 95; South Dakota, 89; North Dakota, 92.

The average percentage of acreage for both spring and winter wheat for the whole country is 89.8, and the condition for the same 78.8.

The percentage of the acreage of oats, as compared with last year, is 100.7, and the condition 88.9 for June 1, as against 88.5 for the same month in 1892. Returns show the percentage of the acreage of rye as compared with 1892 to be 94.3, while the reports of the condition make the general average 84.6, the lowest for years. Barley acreage, as compared with last year, shows a decrease of 5.1 points, or 94.9. The condition of this crop is 88.3, against 92.1 in June last year.

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, June 10, 1893, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany	8,000	25,000	4,000		
Baltimore	843,000	615,000	6,000	65,000	
Boston	190,000	58,000	18,000	1,000	20,000
Buffalo	2,912,000	490,000	106,000	21,000	45,000
do afloat					
Chicago	20,061,000	2,893,000	610,000	127,000	10,000
do afloat					
Cincinnati	8,000	6,000	4,000	2,000	
Detroit	1,265,000	20,000	41,000	2,000	52,000
do afloat					
Duluth	10,550,000			5,000	4,000
do afloat					
Indianapolis	114,000	26,000	85,000		
Kansas City	965,000	126,000	50,000	5,000	
Milwaukee	1,488,000	10,000	67,000	70,000	50,000
do afloat					
Minneapolis	10,428,000	23,000	13,000	5,000	2,000
Montreal	538,000	82,000	312,000	46,000	79,000
New York	6,270,000	802,000	379,000	64,000	
do afloat	793,000	58,000		24,000	
Oswego					55,000
Peoria	103,000	52,000	140,000	10,000	2,000
Philadelphia	939,000	352,000	144,000		
St. Louis	3,260,000	314,000	111,000		
do afloat	79,000	117,000	45,000		
Toledo	2,271,000	131,000	16,000	2,000	
Toronto	189,000	18,000			35,000
On Canals	2,840,000	166,000	18,000	74,000	
On Lakes	2,659,000	1,783,000	798,000	39,000	
On Miss. River	502,000	47,000	20,000		
Grand total	68,662,000	8,158,000	3,031,000	589,000	354,000
Same date last year	26,650,000	4,628,000	3,897,000	531,000	396,000

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector George P. Bunker the grain received at Chicago during the month of April was graded as follows:

WINTER WHEAT.

Railroad.	White.			Hard.			Red.			No G'de.
	2	3	4	1	2	3	1	2	3	4
C. B. & Q.	3	4	1	4	4	10	21	9	1	
C. R. I. & P.	3	1	1	4	24	5	30	8		
C. & A.	3	1	1	3		18	8			
Illinois Central	4	1	5	16	5	91	15	4		
Freeport Div.	1	1	1	19	1	1				
Galena Div. N. W.	1	1	6	19	1	1				
Wis. Div. N. W.	1	1	1	1	7	4	1			
Wabash	1	1	1	1	5	34	8			
C. & E. I.	1	1	1	1	4	24	12	3		
C. M. & St. P.	2	1	1	1	9	22	1			
Wis. Cent.	1	1	1	1	121	7	8	23		
C. Gr. Western	2	2	13	25	160	34	8			
A. T. & S. Fe.	4	2	114	29	171	297	106	2		
Through & Spec.										
Total each grade	1	19	8	148	242	384	584	200	21	
Total W. wheat									1,607	

SPRING WHEAT.

Railroads.	Northern.			2	3	4	No Grade	White.	Mixed
	2	3	4	1	2	3	4	2	3
C. B. & Q.	252	106	28					31	
C. R. I. & P.	2	21	3					3	
C. & A.									
Illinois Central		1	1						
Freeport Div.									
Galena Div. N. W.	14	85	14					5	1
Wis. Div. N. W.	3	6	2						
Wabash									
C. & E. I.									
C. M. & St. P.	1,643	617	22					4	1
Wis. Cent.									
C. Gr. Western	77	13	3					1	1
A. T. & S. Fe.	1								
Through & Spec.	1,096	213	23					244	6
Total each grade	3,088	1,062	99					285	11
Total sp. wheat									4,551

CORN.

Railroad.	Yellow.		White.		2	3	4	No Grade.
	2	3	2	3	2	3	4	No Grade.
C. B. & Q.	958	186	109	10	1,784	315	74	7
C. R. I. & P.	132	153	30	23	215	247	34	2
C. & A.	144	102	20	23	139	73	53	3
Illinois Cent.	423	436	60	130	162	162	218	30
Freeport Div.	31	21	3	8	15	19	24	2
Gal. Div. N. W.	236	170	30	12	211	193	108	2
Wis. Div. N. W.	5	3			1	3	2	
Wabash	79	192	7	39	13	146	96	4
C. & E. I.	30	40	4	6	17	37	35	2
C. M. & St. P.	53	29	3		79	73	28	3
Wis. Cent.								
C. G. Western	74	62			36	26	9	
A. T. & S. Fe.	124	38	17	12	139	46	16	2
Th'gh & Spec.	11	65			7	1	27	3
Total each grade	2,300	1,497	283	266	2,812	1,367	725	60
Total corn								9,300

OATS.

Railroad.	White.			2	3	White Clipped.		No Grade.
	1	2	3			1	2	
C. B. & Q.....	82		910	198	104		1	5
C. R. I. & P.....	20		966	56	292		6	5
C. & A.....	2		121	104	74			3
Illinois Central.....	1		276	490	120			1
Freeport Div.....	8		224	38	117			1
Galena Div. N. W.....	9		934	42	296			3
Wis. Div. N. W.....			121		40			5
Wabash.....	4		79	127	30			
C. & E. I.....	6		25	58	21			
C. M. & St. P.....	20		618	40	163			5
Wisconsin Central.....			6		1			1
C. G. Western.....	1		198	13	59			1
A. T. & S. Fe.....	60		143	237	41			
Through & Specia.....			121	84	53			13
Total each grade.....	213		4,745	1,487	1,411		7	43
Total oats.....								7,906

RYE.

Railroad.	1	2	3	No Grade.
C. B. & Q.				12
C. R. I. & P.				24
C. & A.				16
Illinois Central				4
Freeport Div.				3
Galena Div. N. W.				6
Wisconsin Div. N. W.				11
Wabash				1
C. & E. I.				1
C. M. & St. P.				25
Wisconsin Central				1
C. G. Western				5
A. T. & S. Fe.				1
Through & Spec.				3
Total each grade				85
Total rye				122
				207

BARLEY.

Railroad.	Bay Brewing.	Chevalier.	1	2	3	No Grade.	Total No. Cars by Each Road.
	3	3	2	3	4	5	
C. B. & Q.			18	13	5		5,286
C. R. I. & P.	1		10	52			2,386
C. & A.							916
Illinois Central							2,657
Freeport Div.			2	11	2		542
Galena Div. N. W.			30	18	4		2,462
Wis. Div. N. W.			88	50			366
Wabash							866
C. & E. I.							329
C. M. & St. P.	1		101	45	1		3,629
Wisconsin Central							10
C. G. Western				16	1		761
A. T. & S. Fe.				1			1,126
Through & Spec.			7	10			2,748
Total each grade	1	1	256	217	13	15	24,084
Total barley							503
Total all grain							24,084

FLAXSEED AT CHICAGO.

The monthly receipts and shipments of flaxseed at Chicago during the past seventeen months, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1893.	1892.	1893.	1892.
January	396,550	782,650	323,261	296,355
February	187,550	556,050	232,555	200,884
March	367,950	592,900	333,257	223,395
April	232,650	547,800	660,506	702,589
May	190,300	309,650	401,359	743,980
June		563,750		577,002
July		612,700		806,375
August		729,300		1,009,113
September		761,750		974,668
October		1,452,000		1,150,685
November		1,365,350		1,365,880
December		743,050		228,060
Total	1,375,000	9,046,950	1,950,938	8,278,936

RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during May, 1893 and 1892, of seeds, hay and broom corn:

	Repts.	Timothy lbs.	Clover lbs.	Other grass seeds, lbs.	Flax-seed, bu.	Broom corn, lbs.	Hay, tons.
1893	412,698	141,507	331,087	191,304	156,400	21,824	
1892	1,406,238	185,726	382,366	462,232	493,985	14,865	
Shipments							
1893	1,717,331	133,976	414,735	459,724	734,623	3,164	
1892	1,304,426	128,747	984,178	735,791	659,114	1,942	

RANGE OF PRICES AT CHICAGO.

The daily range of prices of grain for May delivery at Chicago since May 15 and for June delivery since June 1 has been as follows:

May.	WHEAT.				CORN.			OATS.			RYE.		BARLEY.		FLAX SEED.	
	Low.	High.	Closing.		Low.	High.	Closing.	Low.	High.	Closing.	Low.	High.	Low.	High.	Low.	High.
1573	73 3/4	73	42 3/4	43	43	39 3/4	30	29 3/4	60	60	44	56	105	105		
1672 3/4	73 3/4	73 3/4	42 3/4	43	43	39 3/4	30	29 3/4	62	62	45	50	105	105		
1771 3/4	73 3/4	73 3/4	42 3/4	43	43	39 3/4	30	29 3/4	62	62	45	50	105 1/2	102 1/2		
1870 3/4	71 3/4	70 3/4	41 3/4	42 3/4	41 3/4	39 3/4	29 3/4	29 3/4	61 3/4	61 3/4	38	48	102 1/2	102 1/2		
1970 3/4	71 3/4	71 3/4	41 3/4	42 3/4	42	39 3/4	29 3/4	29 3/4	61 3/4	61 3/4	38	48	103 1/2	103 1/2		
2070 3/4	71 3/4	71 3/4	41 3/4	41 3/4	41 3/4	29 3/4	29 3/4	29 3/4	61 3/4	61 3/4	39	49	103	103		
21																
2271	71 3/4	71 3/4	41 3/4	41 3/4	41 3/4	30 3/4	30 3/4	30 3/4	59	59	42	52	103	103		
2371	71 3/4	71 3/4	40 3/4	41 3/4	40 3/4	30 3/4	30 3/4	30 3/4	57	57	40	50	104	104		
2470 3/4	71 3/4	70 3/4	40 3/4	41 3/4	41 3/4	30	31	31	56	56	40	52	105	105 1/2		
2570 3/4	71 3/4	71 3/4	41	41 3/4	41 3/4	31 3/4	32	31 3/4	56	56	48	60	105	105		
2670 3/4	71 3/4	70 3/4	41	41 3/4	41	31	31 1/4	1	56	56	43	58	104	104		
2770 3/4	71 3/4	70 3/4	40 3/4	40 3/4	40 3/4	30 3/4	31 1/4	30 3/4	55	55	40	58	104	104		
28																
2968 3/4	70	68 3/4	39 3/4	40	39 3/4	29 3/4	29 3/4	29 3/4	54	55	43	48	104	104		
30																
3168 3/4	69	69	39 3/4	40 3/4	40 3/4	29 3/4	30 3/4	30 3/4	54	55	45	56	104	104		
1	66 3/4	69	66 3/4	39 3/4	40 3/4	29 3/4	30	29 3/4	..	..	37	62	105	105		
2	66 3/4	66 3/4	39	40 3/4	39 3/4	29 3/4	29 3/4	29 3/4	..	..	38	60	102 1/2	102 1/2		
3	66	66 3/4	66 3/4	38 3/4	39 3/4	28 3/4	29 3/4	28 3/4	..	..	55	55	102 1/2	102 1/2		
4																
5	64	66 3/4	64 3/4	37 3/4	38 3/4	27 3/4	28 3/4	27 3/4	51	51 3/4	38	42	102 1/2	102 1/2		
6	63 3/4	65 3/4	65 3/4	37 3/4	37 3/4	27 3/4	27 3/4	27 3/4	50 1/4	..	32	42	101 1/2	101 1/2		
7	64	65	64 3/4	37 3/4	37 3/4	27 3/4	28 3/4	28 3/4	50	..	35	48	102	102		
8	63 3/4	64 3/4	63 3/4	37 3/4	37 3/4	28 3/4	29	29	49	50	36	46	102	102		
9	63 3/4	65 3/4	63 3/4	37 3/4	38 3/4	28 3/4	30	29 3/4	49	..	35	40	101	101		
10	64 3/4	65 3/4	65 3/4	38 3/4	38 3/4	29	29 3/4	29 3/4	49	50	38	42	101	101		
11																
12	64 3/4	65 3/4	64 3/4	38 3/4	38 3/4	29 3/4	29 3/4	29 3/4	48	49	35	40	101	101		
13	64 3/4	66 3/4	65 3/4	38	40	39 3/4	29 3/4	30	29 3/4	..	38	42	101	101		
14																



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ADVERTISING

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., JUNE 15, 1893.

SOME ANCIENT HISTORY OF WHEAT PRICES.

The phenomenally low price for wheat ruling the past few weeks renders interesting a comparison of prices of recent with former times. Records are fortunately available of the price of wheat in England for nearly three hundred years, or from 1595 to the present day. For some years these records are scanty, but they are full enough for all practical purposes of comparison. The price given is the average price reduced to our money for the year.

In 1595, the price of wheat is given at \$1.24; the second year thereafter, it was \$2.26; in 1600 it had fallen to \$1.00 per bushel, and then, until 1608, it never reached \$1.00 and in one year dropped to 79 cents. Then followed ten years of comparatively high prices, the price going below \$1.00 only once, and the highest price being \$1.53 in 1608. After three years of low prices, or under the dollar mark, from 1619 to 1621, wheat never except in two years fell below the dollar mark, from 1622 until 1654. Those two years were in 1627 and 1628, when wheat ruled at 99 and 77 cents respectively. The highest price was in 1648, when a bushel of wheat brought \$2.29.

In 1654 wheat sold down to 62 cents, a phenomenal price when we consider that the year before it sold for \$1.49. Thence on to the end of the century, with some fluctuations, the price of wheat ruled pretty steady at about \$1.20. It got as low as 72 cents in 1688 (the year of the Revolution) and as high as \$2.00 in 1662.

In the eighteenth century, wheat started out in 1700 at \$1.08 and closed in 1799, at \$2.11. The lowest price of the century was in 1743-4, 67 cents, and the highest, \$2.39, in 1796. There were twenty-one years in which the price fell below \$1.00. During the last 39 years of the century the price remained above the dollar limit without a break.

The nineteenth century at its opening found England engaged in the Napoleonic wars, and wheat sold at \$3.55 per bushel. The following year it sold at \$3.63, and in 1802 at \$2.12. Thence on, until long after the exile of Napo-

leon, or until 1821, wheat was never below \$2.00 a bushel. The highest price during this period of universal war and turmoil was in 1812, when wheat sold at \$3.85 a bushel. In 1813 it was \$3.64, and in 1814 \$2.26. From 1820 until 1854, wheat ranged at about \$1.50 a bushel, going as high as \$2.00 or higher, in six years. In 1854, the price was \$2.20; in 1855, \$2.27; in 1856, \$2.10. From thence on it never reached in England the average price of \$2.00 again. In fact the price continually sagged, with exceptional years, until 1885, when it went below \$1.00 and has never been above it (the average price) but one year since, 1891, when the price was \$1.13. It is notable that in England from 1761 to 1885, the average price of wheat was over \$1.00, and much of the time, from 1795 to 1821, above \$2.00 per bushel.

In the United States, in recent years, the highest price for wheat was in May, 1867, when wheat brought \$2.85. The lowest price up to the last month was in January, 1862, 65 cents. In 1864, wheat sold at \$2.26 in June, in 1866 at \$2.03 in November, in 1868 at \$2.20 in July, and only once thereafter was so high a price as \$2.00 obtained, in September, 1888, during the memorable "corner" manipulated by Old Hutch.

WILL PROPEL CANAL BOATS BY ELECTRICITY.

In accordance with the wishes of New York's governor, an experiment will soon be made of propelling boats on the Erie canal by electricity. Overhead wires are being strung above several miles of the canal, and a boat is being equipped with a motor and other machinery necessary to drive it through the mud of the Erie. Even if it proves a success, and there is no reason why it should not, the experiment for which the state appropriated \$10,000 will not help navigation on the Erie. What is needed, and it is needed badly, too, is longer and better locks and a deeper channel.

For some time the boatmen have had more grain to transport than they could take, and at good rates. This is due to the fact that few canal boats can take a full load, on account of the shallow canal, and all are delayed by the short and poorly-equipped locks. If the canal is not improved it will soon become useless. Rail carriers will then advance their rates on grain from Buffalo to the seaboard, and Western shippers will seek other and cheaper routes for their grain. If the merchants of Buffalo and New York City wish to retain their hold on the export grain trade, they should see to it that the canal is improved to meet the requirements of the trade.

THE BOTTOM PRICE ON WHEAT.

The past few weeks have been productive of startling effects on the wheat market. In the general liquidation that has been going on, wheat has been keenly sensitive. The bull clique found it impossible to hold up prices in view of the huge figures of the visible supply and the advent of the new crop. For we are almost at the marketing of a new crop with a visible supply of in the neighborhood of 70,000,000 bushels to carry over. The suppression of the bull clique removed about the only sustaining feature of the market; and in the feeling of general insecurity wheat went tumbling down until it reached bottom, it would seem, on June 8, when cash wheat sold down to 63 cents. This is the lowest price paid in this market in over thirty years. The nearest approach to it was in January, 1862, when it sold at 65 cents. Last year the lowest price reached was 69½ cents in October.

Of course there is one compensating advantage in the bed-rock prices which have prevailed in the market; they may start the long expected export demand. In fact, exports have started up, and it is to be hoped the movement will continue. Large amounts of wheat have been sacrificed in the general stagnation and almost

panic that has prevailed. It is possible that still other sacrifices may be made this month. It is known that banks, particularly Chicago banks, have loans maturing on wheat in store which represent pretty nearly the entire value of the wheat. It is certain that many of these loans will not be renewed along about July 1, and that fact may cause a lot of wheat to be dumped on the market. It is a circumstance, at least, which it is well to bear in mind.

But thereafter, it seems to us, sailing will be comparatively clear. Prices probably will not advance with rapidity; but as exports start up and continue, as we feel assured they will, we think there will be a gradual and sustained advance, which will be accelerated when confidence is restored, which can hardly be long delayed.

IGNORING THE MIDDLEMAN.

In our last number we published an article from the *Progressive Farmer* in which farmers were advised to ship their grain direct to city receivers. A number of farmers' journals have been doing the same thing; in fact they are influenced in doing so by a small advertisement of a Chicago firm, in whose behalf they labor. This same firm has been circulating posters and circular letters throughout the West, in which it solicits farmers to ship their produce direct to it and ignore the country dealer, who keeps his house open the entire year and provides a home market where the producer can dispose of his grain for cash, at a reasonable price, whenever he wants to sell any part of it.

The article referred to has drawn out only two communications from our readers, and one of these claims to be "A Contented Farmer." The other sent us a number of posters and circulars which the commission firm referred to had sent into his county. We are glad to hear from the "Farmer," and our readers will no doubt be pleased to read that at least one farmer is contented. If he is a farmer, and is contented, all of which seems incredible, he must have escaped, by lucky accident, the influence of the agitators and the demagogues.

There is no doubt about the individuality of our other correspondent, and we publish much of the stuff he sent us. That the Chicago firm is vigorously working to have the producers ignore country buyers is clear, but it is not clear that the dealers can do aught to overcome the influence of the agitator and the lying commission man, who charges all other middlemen with being robbers, except by pursuing the even tenor of their way and paying fair prices for grain as heretofore.

The farmer is naturally a speculator, and he often holds products for higher prices when heavily in debt. His scant and unreliable information regarding market influences leads him into many expensive errors. It will not be otherwise with those who attempt to ship their own grain. A few dollars more than offered by the country buyer may be occasionally obtained, but in the long run the farmer will find it far more profitable to sell to the regular buyer at his station.

Handling grain, like any other part of production and distribution, is a business by itself, and those who devote all their time and thought to the business are competent to conduct it far more advantageously and profitably than one who only makes a couple of shipments a year. Regular dealers know the best markets for different grains, and the various qualities of each kind of grain. They know, or should know, how to mix the different grades so as to market the whole at the greatest profit. Many have regular customers among the millers that are always willing to pay a stiff price for first-class unmixed wheat. Each has, or ought to have, his elevator well equipped with cleaning and scouring machines, so he can improve the quality of all grain purchased and get the full value therefor. It is knowing how to mix and where

to market grain at the greatest profit that makes the successful grain dealer, and it is this that gives him the advantage over the farmer when it comes to shipping. The farmer ships to a stranger and takes chances on getting something for his grain. Sometimes he gets a fair price, often nothing.

However, the country grain buyer is indispensable to the trade and will be retained regardless of the fact that avaricious commission man and discontented farmer want to deprive him of his business. The middlemen have all been much abused and denounced because no easier mark presented itself for the agitators and demagogues; but the public, and the farmers especially, are beginning to understand that the middlemen can conduct the business better than farmers, and that they are here to stay.

DEMURRAGE.

Although the average time given by American railroads for loading and unloading cars before demurrage is charged is 48 hours, vigorous attempts have been made in a number of places to cut the time down to 24 hours. The shippers and receivers of some localities, we are sorry to say, have such great fear of the railroads' power that they have meekly submitted to being robbed for detaining cars more than 24 hours. The submissive spirit of these meek ones is what nerves the traffic managers to make such extortionate demands on others.

The patrons of one New England road are required to pay \$1 demurrage for delaying a car more than 24 hours. It matters not whether the car is placed convenient for loading or unloading, the time begins at the minute notice of arrival is given. The demurrage charge is used more for an excuse to rob patrons than to facilitate the movement of freight.

Some lines give 96 and others 60 and 72 hours for loading and unloading, which is more reasonable, but patrons may expect a reduction just as soon as traffic managers think they will submit to it. They have already attempted it in some of the states, but the trade organizations of their patrons were too strong and the imposition was prevented.

If shippers and receivers were alive to their true interests they would take the initiative and demand that carriers should not delay goods any longer than patrons were permitted to delay cars without charge, and that the charge for delaying a carload of grain in excess of the demurrage period should be the same as the charge for delaying a car for loading or unloading in excess of the demurrage period. Let the practice be reciprocal and the time and charges the same, then traffic managers will not be so anxious to reduce the demurrage period to 24 hours.

The Philadelphia Engineering Works, Limited, send to our table their new blast furnace catalogue. It is said to be the first comprehensive catalogue of the kind ever offered to the public. At any rate, it is as fine a specimen of trade literature as we have ever seen; and its general style and makeup could be imitated with advantage by many manufacturers of machinery.

MANY new gas and gasoline engines are being placed upon the market, that are certainly not up to the standard of excellence of the tried and approved engines with which many of our readers are familiar. Like every good thing that meets with a fair demand, the gas engine has many cheap imitators that for practical purposes are not worth the iron put into them. The gas and gasoline engines have been wonderfully popular with elevator men; and the makers of some of the class of engines referred to are banking on the fact that most elevator men are not mechanics and are quite likely to assume that a gas engine is a gas engine. Our readers should know by this time that there are plenty of good

engines to select from, and our advice to intending purchasers is to make their selection from the list of engines that seek to advertise themselves through legitimate channels and whose makers have sufficient confidence in their adaptability for elevator work to place them directly before the grain handling public.

MORE "ANTI-OPTION" INVESTIGATION.

The senate committee appointed to take testimony to discover why farmers don't get rich as fast as plumbers has been looking for facts in Minneapolis. The committee is looking particularly for one class of facts, namely, those which accord with their own ideas of the causes of market depression. Of course they have had no difficulty in finding plenty of witnesses who believe that future selling is the one and only cause of low prices for wheat. Mr. Pillsbury said so. It is true that Mr. Peavey and Mr. Rogers said that demand and supply made prices, and they are considered pretty good authority. Mr. Peavey said that if selling wind put prices down, buying wind would put prices up. He enunciated a simple little axiom that it would appear even a congressman could understand, but possibly they do not want to understand it. When the report is printed it will probably be seen that the committee found an overwhelming sentiment in favor of suppressing future trading.

And yet, while the testimony was being taken, cash wheat in Chicago was 65, and September option 72. In Minneapolis, within a stone's throw of the committee's room, cash wheat was selling at 60 and the September option at 64. Such a pertinent fact will not find place in the committee's report.

GRAIN INSPECTION AT KANSAS CITY.

In a communication published in this number, the chief grain inspector of Kansas claims that an article in our last number was misleading, and attempts to correct "misstatements." We said nothing in disparagement of the work of the Kansas City inspectors, so the inspector errs in attempting to make a correction there.

The establishment of a board of trade at Argentine was prompted solely by avarice. The promoters do not expect to make that a grain center. They are not interested in the grain trade. What they want is money, and they have adopted a very slim excuse for drawing it out of the grain trade. They seem to think that the grain shippers of the state are ambitious philanthropists and have their grain inspected at terminals only to prevent the recipients of their charity being branded as beggars.

The trade does not need and does not want more than one inspection department at any center, for more only add confusion to the business and increase the opportunities for variation in grades. Uniformity of grades and inspections is necessary to the success of any market. As soon as this is lacking in the work at any market, buyers and sellers do business in other markets when convenient.

The Kansas law, which permits private individuals to levy a tax upon the grain trade of the state for private gain, should be amended so as to provide that the funds derived from the inspection of grain shall be used only in paying the actual expenses of the grain inspection department. Then would competent experts be employed in sufficient number to do the work well and the trade would not be charged more than the cost of such service.

If the managers of the Kansas City, Kan., Board of Trade were not guided solely by selfish motives, they would seek to advance the interests of the city's grain trade by reducing the fee for inspection and by applying all receipts therefrom to the improvement of the service.

It is generally supposed that a board of trade is organized solely for the advancement of a city's interest, but with this one the city's interest seems to be a matter of no importance.

We are not at all thin-skinned, and we are perfectly willing to let everybody know what C. Wood Davis of Kansas thinks of us. Therefore we print his letter on another page. Mr. Davis mistakes the notoriety he has achieved as the self-constituted mentor of the farmers, statistician extraordinary to the Alliance, and cup-bearer to Ignatius Donnelly and Doc. Fish, for the real simon-pure article of fame. He is welcome to any opinion he may entertain of himself and of us. But with wheat selling at Chicago at less than 70 cents, in spite of his confident predictions of two years ago, we should think he would follow Brer Rabbit's example and "lay low," instead of laying it to the Board of Trade.

THE JEFFREY MANUFACTURING COMPANY'S exhibit in Machinery Hall (Section 26), at the World's Fair, will be of interest to all users of machinery. In planning their exhibit, they have aimed to show a full line of their manufacture, consisting of chain elevating and conveying machinery and a more complete exhibit of their specialties could not have been made. They have also a large display of their mining machinery in the Department of Mines and Mining. All will be welcomed at their displays. We may note in this connection that the company have just issued a very complete catalogue of their elevating and conveying machinery and coal mining machines, which the reader can obtain by addressing The Jeffrey Manufacturing Company, Columbus, Ohio.

Few grain shippers ever stop to think of the losses they suffer by having their grain delayed by carrier in transit and at point of shipment. All lose interest on the capital invested and many times lose by a decline in the market during the delay. Frequently a good sale is canceled because delivery cannot be made promptly. Often hot or sultry weather causes grain to heat in car, and as when grain is damaged by rain dripping through leaky roof carriers will only pay damages when judgment is secured. Delay in yards along the route only increases the opportunities of thieves and much more grain is stolen than would be if shipments were rushed through. All this causes shipper much annoyance and worry and robs him of many good customers. Sometimes shippers are compelled to suspend in a measure all business until a large quantity of delayed grain arrives at destination. This is enough to justify shippers protesting persistently against delays and demanding pay therefor.

We have received a copy of the "Grain Edition" of Late Letters regarding the Charter Gas and Gasoline Engine, just issued by the Charter Gas Engine Company of Sterling, Ill. That so many letters of commendation, all of late date, should be received from substantially the same source, grain men and millers, tells its own story of the popularity which the "Charter" enjoys with elevator men and millers. As an evidence of the simplicity of the engine, we may note the fact that over ninety per cent. of those mentioned in this book were set up and started by printed directions, and the exceptions in most cases were engines of the earlier construction and not as simple as their present engines. Another point in the testimony of customers worthy of note is that cold weather has no effect upon the "Charter," and that it runs equally well under all conditions. Still another point brought out by the letters is the concurrent testimony that insurance is not affected by placing the "Charter." Taken all in all the "Grain Edition" makes a very flattering exhibit for the Charter Gas Engine Company.

EDITORIAL MENTION

CLEAN bills of lading for grain shipments in Kansas after July 1.

WHAT has become of the Illinois Grain Merchants' Protective Association?

READERS will confer a favor by sending us the trade news of their district.

WE ARE always pleased to publish the opinions of those connected with the trade on any subject of interest to those connected with the grain business.

NEBRASKA'S new freight rates, secured by law, do not seem to be meeting with great favor with either shippers or receivers. The rate makers should try again.

SOUVENIR Guides to the World's Fair and Chicago, free to grain dealers at the office of the AMERICAN ELEVATOR AND GRAIN TRADE, Room 5, 184 Dearborn Street, Chicago.

THE exhibit of cereals at the World's Columbian Exposition is superior to anything made before. Splendid exhibits are to be found not only in the Agricultural Building but in the State Buildings as well.

As usual, the Cincinnati *Price Current's* Statistical Annual for the year ending March 1 is full of reliable and valuable statistics relating to the grain and provision trade, all well arranged and convenient for use.

RAILROAD commissioners, shippers and station agents are all in favor of the uniform classification of freight rates, and rightly so; but traffic managers will ever oppose it, for that is the key to fat dividends on watered stock.

OWING to the extreme apathy of those connected with the hay trade the hay dealers' convention will not be held in Chicago this month as was intended. In fact, it is very doubtful if it will be held any time during the World's Fair.

THE Marine underwriters are fighting among themselves over grain insurance from Chicago to Buffalo. They have already cut the rate from 50 to 30 cents, and apparently expect soon to rate grain at the same price as flour, which they carry at 10 and 12½ cents per \$100.

In this issue we give an extract from a recent decision of the United States Supreme Court in which the highest court of the land again sustains the legality of trading on commercial exchanges for future delivery. Anti-Option Bill rolled over in his grave and groaned.

KANSAS millers are so certain that the state will not raise enough wheat to keep their mills running that they have been buying wheat on the Kansas City market for July and September delivery. And yet Kansas raised more wheat last year than was ever before produced by one state.

A KANSAS law provides that the grain shippers of that state shall be given a clean bill of lading after July 1. Shippers of other states could have the same thing if they would act together and demand it, but we have received so few complaints of late that we doubt they

want it. It is not every shipper that is contented to receive pay for only two-thirds or even three-fourths of the grain he places in the car for shipment, but it seems all of this class live in Kansas.

TROMANHAUSER BROS. of Minneapolis, Minn., have just been awarded the contract to build a 1,000,000-bushel storage house onto the plant of the Interior Elevator Co. of Minneapolis, giving the plant a capacity of 3,000,000 bushels. They are just completing eight elevators for the Eagle Roller Mill Co. of New Ulm, Minn.

EVERY shipper who has hopper scales and loading bin in his elevator can insist with some show of reason, upon carrier giving him a clean bill of lading for his grain shipments. If carrier objects let station agent witness weighing of grain into loading bins, then no excuse can be advanced for refusing to give a receipt for every bushel.

DO NOT accept old worn out cars for shipping grain in. Even if no leaks can be discovered, a heavy load, a jar or a strain is very likely to cause the delivery of part of your grain at points not named in the bill of lading. If you had a specific receipt for every pound of your grain, carriers would object to it being loaded in poor cars and see to it that all was delivered.

"A New Field for Elevator Men" is described by an illustrated article in this number. Many country dealers could do a profitable hay business in connection with their grain business, without interfering in the least with their grain business. European countries were short on hay last year, and the prospects are that our export hay trade for the next crop year will exceed the year just closing.

An attempt is being made in the Illinois legislature to force state grades and state inspection of grain upon East St. Louis and Peoria, but, as the session is so near the close, there is little probability of the scheme meeting with success. A state inspection department could be established at these points if the dealers wanted it without any change in the present law. By the proposed law it was intended to force it upon them.

THE Ohio Grain Dealers' Association had its annual fishing excursion to Put-in-Bay recently, and now about 75 of them are sawing the air with their hands as they relate how "I landed that big 'un." Members of the trade of other states could with profit and pleasure to themselves become better acquainted with one another. An annual convention and banquet or fishing trip would prove attractive features that ought to draw.

In this issue we publish an article from a journal devoted to railway interests in which is pointed out one very weak spot in the operation of railways that causes many delays. For years carriers have devoted much attention to reducing the time required to transport passengers and perishable freight, and they have succeeded in making a material reduction, but it seems as though the reduction in the time required to transport this class of traffic had been added to the time taken to transport grain. The time taken to transport grain could with little effort be cut in two.

AFTER an absence of two years in New York City, "Old Hutch" has returned to Chicago. He was too old to get acclimated in New York, and says he has come back to Chicago for good. It is the scene of his battles, victories and reverses, and probably he will never be enticed to leave it again. It is curious that B. P. Hutchinson never lost a big fight. In all the large affairs he was successful. It was the aggrega-

tion of small losses that finally wrecked his fortune. And by the way, he predicts that Pardridge will get plucked some day. "Old Hutch" knows how it is himself to have the whole crowd against him. Nevertheless, he has many warm personal friends among the "boys," for no one on the board ever helped so many to their feet.

THE Chicago Grain Receivers' and Shippers' Association is either dead or opposed to a grain dealers' convention in Chicago during the World's Fair. We have addressed a number of letters to the officers and members of the association, but received few replies and those showing us that courtesy were not enthusiastically in favor of a grain dealers' convention. The convention should be held, and if dealers will they can have a first-class convention without the Receivers' Association.

THE BOSTON BELTING Co., of 256 to 260 Devonshire street, Boston, and 100 Chambers street, New York, has a splendid exhibit of belting, hose, packing, valves, gaskets and other mechanical rubber goods at the Columbian Exposition, in Section 15, Column J, Number 27, of Machinery Hall. One little piece of goods, the product of this well-known company, is on exhibition (and in use) at our office; a chamois skin pen-wiper, a courtesy which we acknowledge a score of times or so a day, in the use thereof.

THE Kansas City Hay Exchange is not receiving the support and patronage promised by the hay dealers of that city, and its proprietors have sued several dealers for circulating false reports and denouncing the managers of the exchange in letters to country shippers. The trade of that city could be greatly facilitated by a well equipped hay warehouse conveniently located. It is to be hoped that a compromise will be reached whereby the trade will have the advantages of the new exchange.

WE notice a very interesting and significant paragraph in the *Mercantile Gazette* of St. Petersburg—a paper published by the Russian government—of the decision to build in Moscow a set of very large elevators capable to store all the grain necessary for the use, during a certain period, of the provinces surrounding Moscow. It is asserted that such a system of elevators will help to regulate the prices and is sure to confer a great boon on the farmers, who will thus be able to store cheaply the grain and wait till the time comes when they can get a suitable price for it.

THE attorney-general of Kansas is what would popularly be termed a "lulu." Assuming that the millers of Kansas have established a trust, he proposes to break it up by having the Legislature declare all mills "public mills," and regulate the charges which they shall make. That is, a farmer could go to one of the big mills at Topeka and compel the miller to grind his grist, though the actual loss to the miller in stopping and starting his mill (a large roller mill loses money every time it stops) should amount to more than the value of the farmer's grist. Kansas must expect some queer legislation until she gets rid of her present breed of statesmen.

THE Warehouse Registrar at Chicago has made several reports of grain stocks in public elevators lately that contained egregious errors, and finally decided not to make any report of the stocks until Tuesday instead of Monday as heretofore. This naturally aroused the members of the trade to do something to secure correct reports on Monday, as of old, but as yet they have not succeeded. Hereafter the official figures will be sent to the secretary of the Board of Trade each day of the week up to Saturday, but the report for that day will be made in car-

loads and an estimate will be made up from these reports. As a carload of grain is a variable quantity, the visible supply reports sent out on Monday will not be reliable. The registrar should be shaken up by his superior and made to get the reports out on time. The reports are issued on Monday at other grain centers and no good reason can be advanced for delaying Chicago reports until Tuesday.

SENATOR PEPPER of Kansas has been in Chicago getting personal information from grain men and packers as to the manner in which the live stock and grain interests are conducted. Senator Pepper is a member of a Senate committee that is making an investigation into the subject of market methods as they affect the farmers' interests. Judging from some of the Senator's utterances in the past, he has a great deal to learn of the methods followed in the grain business and kindred interests; but it is only due him to say that he is not the implacable fire-eater that he was supposed to be. Senator Washburn is also a member of the committee.

THE export hay trade of this continent, which has been large during the past ten months, has not been satisfactory or profitable to exporters for the very good reason that shipments have been made in a slipshod manner. Ordinary business methods have been lacking. Shipments were often unmarked and hence were mixed up with the shipments of others. The result has been that foreign receivers have had mixed lots of hay to sell and some shipments were short while others overrun. Carriers mixed consignments so shipments lacked uniformity of quality and size of package. Under such discouraging conditions no trade can thrive. A reform should be instituted, packages should be plainly marked and grades maintained.

A CHICAGO man recently attached "& Co." to his name, leased a desk and solicited consignment of grain and flour—not through the advertising columns of a legitimate journal but by circular letters. Not succeeding in catching suckers with this bait, he sent for samples and offered to give just a little more than the market price, providing he was given 30 days' time. This plan succeeded better and several shipments sent to him were sacrificed on the market for cash. He has departed and taken the receipts with him. Another firm, or rather an incorporated company, that has been playing all kinds of skin games on country shippers, has not opened its office and warehouse for over a week. Its victims probably became too numerous and too active. Shippers cannot be too careful about shipping to strangers.

A TOPEKA reporter with a vivid imagination and a desire to destroy the influence of the daily newspapers has sent out a number of weird stories of late. The last is an exposition of the way the Kansas City, Kan., Board of Trade has been robbing the poor farmers whose grain passed through that city on its way to Chicago. The chief grain inspector is falsely credited with saying that "heretofore the inspectors have 'stood in' with the Board of Trade and by false inspection robbed the farmers of Kansas of \$30,000 or \$40,000 per year. This plan has been to grade No. 1 wheat No. 2, and No. 2 No. 3, and so on, reducing the price per bushel from 3 to 6 cents or more. Jones says a proposition was made to him to wink at this steal and that he was promised a good dividend for the robbery." Such rot. The blooming idiot who sent out that report must familiarize himself with the practices of the grain trade if he would have his lies credited. The report may destroy the faith of farmer shippers in Kansas City inspection, but regular dealers are too well posted to be led away by any such malicious charges.

Trade Notes.

The Otto Gas Engine Works have removed their Chicago office from 151 Monroe street to 245 Lake street.

Huntley, Cranson & Hammond of Silver Creek, N. Y., report business so far this month to be in excess of any preceding June.

The Chicago Recording Scale Company has been incorporated at Chicago, Ill., to manufacture scales and electric machinery. The capital stock is \$50,000, and the incorporators are H. S. Clark, C. C. Russell and E. H. Smith.

The Davidson-Martin Company has been incorporated at Port Huron, Mich., to manufacture the Davidson Gravity Cut-Off Grain Cleaner. The capital stock is \$60,000, and the incorporators are David J. Davidson, A. S. Martin, Stephen G. Martin, Walter Pendray and A. E. Chadwick.

The Charter Gas Engine Company of Sterling, Ill., write us "that they have been favored with many and large orders for their engines, having received in one day orders for just even 24 engines, or two dozen, so that their order book has presented a very fine appearance. The company anticipate a volume of trade largely in excess of former years and in all of them have been unable to meet the demand when the season fairly opened, for elevators and kindred lines."

The fraud perpetrated on American inventors by E. Boettcher, president of the "Parisian Inventors Academy," was recently exposed by the authorities of the Franklin Institute of Philadelphia. Mr. Boettcher sent circulars broadcast among the inventors of the United States, informing them that they had been elected members of honor of the academy, and that with this distinction went a "first-class diploma" and a "great gold medal." "This valuable title," naively announces the circular, "will be no expense to you, but if you are desirous to receive the medal and diploma you would have to send us a post money order of \$10 to cover the admission taxes, freight, etc., and we shall send both well packed and free of charge to your address." The academy has no existence save on paper.

The Pennsylvania General Electric Company for the Hudson Electric Light & Power Company have placed an order with the Philadelphia Engine Works, Limited, for nominally a 1,000-horse power Cross Compound Condensing Engine. This engine has a high pressure cylinder 26" in diameter, low pressure cylinder 50" in diameter and 54" stroke. It is intended strictly for electric railway work, and is built excessively heavy as may be gleaned from the fact that the journals are 16" in diameter and 30" long, center shaft 18" in diameter. The band wheel is to be 22' in diameter, 74" face, weight 100,000 pounds when finished. The greatest care is taken in designing and securing this wheel, so that the unfortunate occurrences so frequently taken place shall be avoided, all port areas of both cylinders being excessively large, the low pressure being three times larger than the high. It is to have an independent condenser, supplied with two 24" air cylinders, 10' stroke, traveling in opposite directions. The receiver is made of good capacity and thoroughly reheated with numerous solid drawn brass tubing running through it, thus revivifying and practically superheating the steam while entering the low pressure cylinder. The plan adopted in proportions will be much the same as the two vertical Cross Compound Condensing Engines built by the Philadelphia Engine Works, Limited, for Hudson Electric Light Company, Hoboken, N. J., between which this horizontal engine is to be placed. These vertical Cross Compound Engines have given very satisfactory results, running at 100 revolutions per minute, developing about 600-horse power, but frequently reaching 800-horse power. It was the excellent economy and satisfactory results achieved by these engines which has warranted the company in placing this order with this engineering firm. These works have now on hand three 50" Corliss Cylinders, 6' stroke, for compressing air for the blast furnace at Poughkeepsie, N. Y. The fly wheels are 100,000 pounds' weight and 24' diameter. The frames are not of the ordinary Corliss, but of box

form (a type used more generally in England than America). In addition to these, they have quite a number of from 200 to 400-horse power Corliss Engines, of standard type, in progress, all being built to order.

IMPORTS OF BREADSTUFFS.

According to the report of S. G. Brock, chief of the bureau of statistics, we imported in April 82,503 bushels of barley, 16,760 of wheat, 84 of corn, 2,769 of oats, no rye, 23,362 pounds of oatmeal and 20 barrels of wheat flour; against 186,455 bushels of barley, 62,148 of wheat, 37 of corn, 2,163 of oats, 2 of rye, 25,154 pounds of oatmeal and 36 barrels of wheat flour in April of 1892.

For the ten months ending with April the imports were 1,884,197 bushels of barley, valued at \$882,073; 753,601 of wheat, valued at \$534,603; 1,786 of corn, valued at \$1,238; 14,019 of oats, valued at \$6,343; 143 of rye, valued at \$291; 480,173 pounds of oatmeal, valued at \$23,843, and 372 barrels of wheat flour, valued at \$2,071, for the corresponding period of 1891-2.

Of foreign breadstuffs we re-exported during the ten months 33,983 bushels of barley, 547,005 bushels of wheat, no corn, oats or rye, 36,000 pounds of oatmeal, and no wheat flour; compared with 504,301 bushels of barley, 1,503,509 of wheat, 9,731 of corn, 6,966 of oats, 16,172 of rye, 96 pounds of oatmeal, and 102 barrels of wheat flour, during the corresponding period of 1891-2.

RICE IMPORTS.

We imported in April 94,000 pounds of rice from the Hawaiian Islands, 5,932,422 pounds of other foreign rice, and 5,590,034 pounds of flour, meal and broken rice, compared with 914,400 pounds of Hawaiian rice, 11,469,818 pounds of other foreign rice, and 5,267,944 pounds of flour, meal and broken rice for the month of April, 1892.

During the ten months ending with April we imported 7,878,800 pounds of rice, valued at \$327,084, from the Hawaiian Islands, 63,605,221 pounds of other foreign rice, valued at \$1,104,589, and 55,056,913 pounds of flour, meal and broken rice, valued at \$1,010,573; compared with 6,222,000 pounds, valued at \$309,639, from the Hawaiian Islands; 60,327,640 pounds, valued at \$1,225,004, from other foreign countries, and 50,099,077 pounds flour, meal and broken rice, valued at \$853,583, during the corresponding period of 1891-2.

We exported 57,479 pounds of Hawaiian rice and 8,877,725 pounds of other foreign rice during the ten months ending with April; compared with 14,150 pounds of Hawaiian and 9,152,790 pounds of other foreign rice during the corresponding period of 1891-2.

EXPORTS OF BREADSTUFFS.

According to the last export of S. G. Brock, chief of the bureau of statistics, the exports of breadstuffs during the eleven months ending with May were valued at \$173,069,261, against \$272,476,023 during the corresponding period of 1891-2. The breadstuffs exported during the five months ending with May were valued at \$68,443,683, against \$116,486,830 during the corresponding months last year. The May exports were valued at \$15,415,342, against \$19,410,394 in May, 1892.

During the eleven months ending with May we exported 104,313,450 bushels of wheat, valued at \$83,748,883; against 143,538,001 bushels, valued at \$148,423,648, during the corresponding period of 1891-2. The exports of other cereals, compared with the corresponding period of 1891-2, were as follows: 34,140,311 bushels of corn, valued at \$17,928,978; against 70,753,137 bushels valued at \$38,944,295;—1,601,203 bushels of oats, valued at \$645,878; against 8,772,996 bushels, valued at 3,589,750;—1,277,880 bushels of rye, valued at \$881,457; against 11,424,519 bushels, valued at \$10,916,591;—2,554,531 bushels of barley, valued at \$1,240,701; against 2,741,713 bushels valued at \$1,722,168;—and 14,896,396 barrels of wheat flour, valued at \$67,779,769; against 13,548,518 barrels, valued at \$67,509,192.

The decrease in the volume is accompanied by a shrinkage in the value of all exports, which is most remarkable in the case of wheat.

ELEVATOR

GRAIN NEWS

Butler, Mo., needs a grain elevator.

E. B. Hazen will build an elevator at Philo, Ill.

T. S. Isaacks is building a rice mill at Opelousas, La.

Send us news of your district of interest to the trade.

Babcock & Yoder are building an elevator at Topeka, Ind.

Work has begun on the new grain elevator at Bradford, Ill.

Ernest & Co., of New Orleans, La., are building a rice mill.

Work has begun on a new cotton seed oil mill at Vidalia, La.

The round elevator at Delano, Minn., is doing a good business.

L. T. Hutchins has nearly finished his new elevator at Iroquois, Ill.

Murdock, Minn., shipped during the past year 10,000 tons of hay.

R. A. L. Davis & Co. will build an elevator at Partridge, Kan.

Lutz, Beltz & Co. of Chicago will build a brewery at Pueblo, Colo.

A. M. Henderson, grain dealer at Chicago, has suspended business.

A grain elevator or warehouse will be built at Springfield, Minn.

The "Belt Line Elevator" at Superior, Wis., is about to be started.

The Union Brewing Company of Boston, Mass., is building a brewery.

The Innis Cotton Oil Company is building a mill near Smithland, La.

The Consumers' Brewing Company of Lowell, Mass., is building a brewery.

The Franklin Milling & Grain Company, of Franklin, Ind., has sold out.

A cotton seed oil mill and fertilizer factory is to be built at Jug Tavern, Ga.

Gustavson Bros. of Collender, Ia., are shelling their corn and shipping it East.

Cole & Fuller, grain dealers at Kansas City, Mo., have dissolved partnership.

Hall Bros. are building an elevator at Mt. Vernon, N. Y., to cost \$18,000.

R. Heger will build an elevator of 100,000 bushels' capacity at Jefferson, Wis.

The Tritschler & Tiesse Malting Company is building a brewery at Lyons, Ia.

The Whirlpool Brewing Company of Niagara Falls, N. Y., will build a brewery.

W. B. Rochon, dealer in grain and lumber at Octavia, Neb., has sold out.

A 7,000-bushel elevator is being built at Wahpeton, N. D., by the mill company.

Abraham Bailey, commission grain dealer at Duluth, Minn., has disappeared.

A company has been organized to build a cotton seed oil mill at Meridian, Miss.

H. H. Wink bought G. A. Sauer's grain elevator at Toluca, Ill., recently for \$5,000.

O. Pinkerton & Co., grain dealers at Crescent City, Ill., have dissolved partnership.

A co-operative warehouse of 15,000 bushels capacity is to be built at Lewiston, Minn.

John Lamsden of St. Louis, Mo., will make some changes in his grain warehouse.

The St. Louis Elevator Company of St. Louis, Mo., will build a large grain elevator.

The Globe Brewing Company has been incorporated at Chicago with \$200,000 capital.

Charles M. Furber, dealer in grain and feed at Minneapolis, Minn., has sold out.

William Wykes, grain dealer and banker at Carbondale, Ill., has suspended business.

Work has begun on the new elevator of Linton & Chandler at South Superior, Wis.

The Cincinnati, Hamilton & Dayton Elevator Company of Toledo, O., and the Pennsylvania Railroad

Company have recently purchased scales with the Demuth Patent Check Beams.

Nelson Van Kirk, commission grain dealer at Chicago, Ill., has suspended business.

G. W. Wylie & Co., commission grain dealers at Chicago, have suspended business.

G. B. Greer & Co. of Sikeston, Mo., are building a 50,000-bushel elevator at their mill.

The J. Q. Adams Company has bought the "Midland Elevator" at Sioux Centre, Ia.

Schlafer, Huebner & Co. of Menomonie, Wis., will build an elevator at their flour mill.

A firm at Mauston, Wis., shipped 5,000 bushels of oats during the week ending June 3.

The New South Brewing & Ice Company has been incorporated at Middlesborough, Ky.

The new grain elevators of Cargill Bros. at West Superior, Wis., have been completed.

Popel & Giller of Warsaw, Ill., are rebuilding their brewery, which was recently burned.

James Johns of Minneapolis, Minn., contemplates building an elevator at Superior, Wis.

Gentert & Co., dealers in grain and live stock at Holstein, Neb., have sold their elevator.

The Farmers' Shipping Association is building a 20,000-bushel elevator at Preston, Minn.

A fiber factory, to consume 30 to 40 tons of flax straw, will be built at Sioux Falls, S. D.

Cole & Fuller, grain dealers at Kansas City, Mo., have been succeeded by A. T. Cole & Co.

The Atkinson-Zerwekh Company has been incorporated at Seattle, Wash., to deal in grain.

The American Brewing Company has been organized at Houston, Tex., with \$350,000 capital.

T. Gilmour & Co., grain dealers and grocers at Blockville, Ont., have dissolved partnership.

Panton & Lamport, dealers in grain, hay and feed at Billings, Mont., have dissolved partnership.

C. B. Crittenden, dealer in grain and coal at Red Oak, Ia., has been succeeded by Taylor & Willey.

Heissing Bros., of Minneapolis, Minn., will build a 40,000-bushel grain elevator at Devil's Lake, N. D.

The new elevator of the Whirlpool Brewing Company at Tonawanda, N. Y., has just been finished.

A cotton seed oil mill will be built at Shellman, Ga., by the Shellman Co-operative Investment Company.

Frank Albro of Ayrshire, Ia., has recently bought the grain elevator of Rodhe Bros., at Estherville, Ia.

An elevator of 75,000 bushels' capacity is being built in connection with the "Urban Mill" at Buffalo, N. Y.

Schwartz, Dupee & McCormick, commission grain dealers on the Board of Trade, have dissolved partnership.

Coen & Paxton, dealers in grain, hay and coal at Rensselaer, Ind., have been succeeded by Chas. W. Coen.

An elevator of 25,000 bushels capacity is being built at New Athens, Ill., by the New Athens Milling Company.

The Geo. W. Wicks Commission Company has been incorporated at Louisville, Ky., with \$20,000 capital stock.

The Garfield Farmers' Elevator Company has been organized at Fertile, Minn., with \$10,000 capital stock.

The Garfield Mill & Elevator Company has been incorporated at Garfield, Kan., with \$5,000 capital stock.

W. H. Harris has brought suit against the Kansas Elevator Company of Kansas City, Kan., to recover \$2,000.

Daniel Talmage, Sons & Co., of New Orleans, La., will rebuild their rice mill which was recently burned.

Dunham & Smith of De Pere, Wis., are about to increase the capacity of their elevator by 12,000 bushels.

The Chicago Produce Commission Company of 201 West Randolph street, Chicago, has discontinued business.

An elevator of 50,000 bushels' capacity is being built at Bowling Green, Ky., by the Bowling Green Milling Company.

The opening of a brewery at Calgary, Alberta, Can., has induced farmers to increase their acreage of barley.

J. W. Sandison, known as the "wheat king of Brandon," has fled from Winnipeg, Man., leaving debts aggregating \$100,000. In late years he did not confine

his attention to grain dealing, but engaged in various speculative operations, which caused his downfall.

The Rome County Milling & Elevator Company has been incorporated at Columbia, Mo., with \$4,500 capital stock.

An elevator of 30,000 bushels capacity will be built at Fredericksburg, Tex., in connection with a new flour mill.

All the elevators, present and prospective, at Duluth and Superior will have a total capacity of 28,000,000 bushels.

Macklen & Slater of Niagara Falls, N. Y., will build a 500,000-bushel elevator on the Canadian side of the river.

The Canadian Pacific Railway Company has recently completed a 300,000-bushel elevator at St. Johns, N. B.

E. M. Walbridge of Northfield, Minn., will move his grain elevator back three feet and will then put in steam power.

W. A. Watson of St. Joseph, Ill., has sold his elevator at that place to Mr. Reed of Reed & Townsend of Sidney, Ill.

The Velasco Oil Company has been incorporated at Velasco, Tex., to build a cotton seed oil mill. Capital stock \$250,000.

Jacob Kuebler will build a brewery at Sandusky, O., according to plans prepared by William Griesser of Chicago, Ill.

The Great Western Elevator Company of Minneapolis, Minn., has increased its capital stock from \$300,000 to \$500,000.

Over five thousand tons of baled hay are annually handled by the two shippers at Remington, Ind. Most of it is timothy.

If you propose to build an elevator let us know it. When it is completed we will be pleased to publish a description of it.

The Beeville Oil Milling Company has been organized at Beeville, Tex., to build a cotton seed oil mill. Capital stock \$25,000.

The grain dealers at Byron, Ill., are buying considerable grain for this season of the year, and are shipping some to Chicago.

Farmers have bought the 4,000 bushels of wheat damaged in the elevator fire at Rossville, Ill., and are feeding it to hogs.

The Platte City Mill & Elevator Company of Platte City, Mo., has made an assignment. Liabilities \$15,000; assets \$20,000.

The Goliad Oil Mill Company has been incorporated at Goliad, Tex., with \$20,000 capital stock, to build a cotton seed oil mill.

The Detroit Union Depot Elevator, Detroit, Mich., is a recent purchaser of scales fitted with the Demuth Patent Check Beams.

The Van Dusen Elevator Company of Minneapolis is about to rebuild the elevator that was burned at Redwood Falls, Minn.

Schwartz, Dupee & Co., commission grain dealers on the Chicago Board of Trade, have taken Mr. Bloom into partnership.

An elevator of 250,000 bushels' capacity is being built at West Superior, Wis., in connection with the "Grand Republic Mill."

A large warehouse is being built in connection with the elevator at Kalamazoo, Mich., by the Grand Rapids & Indiana Railroad.

Jno. W. Guthridge, proprietor of a grain elevator and general store at Flora, Ind., has been succeeded by Guthridge & Hawkins.

W. H. Purcell & Co. of Chicago, Ill., are building another malt house, which will increase their annual output to 2,000,000 bushels.

B. F. Mitchell & Son, grain dealers and millers at Wilmington, N. C., failed recently, making an assignment to Dr. A. H. Baldwin.

Samuel Donald of Stanton, Ia., is clearing away the ruins of his elevator, which was burned last winter, in order to build a new one.

The new "Terminal Elevator" at Superior, Wis., will be started as soon as the engine is ready to run, which will be in a few days.

D. L. & P. O. Harris, grain dealers and millers at South Greencastle, Ind., made an assignment May 19. Liabilities \$15,000; assets \$8,000.

The United Elevator Company, of St. Louis, Mo., has let the contract for a 130,000 bushel elevator, five stories high and 120x173 feet.

More wheat was shipped from elevators at Superior, Wis., during the last three weeks of May than ever before in the same length of time.

The Bellman Grain & Seed Company of Toledo, O., failed May 15. Liabilities \$10,000; assets equal. The company is composed of W. M. Bellman, C. M. Bell-

man, Mrs. W. H. Bellman and Samuel Blanchard, and the capital stock is \$30,000. The firm was formerly known as Crabbs, Bellman & Co.

W. E. Mayes, H. F. Moore and others have organized a company at Crockett, Tex., to build a cotton seed oil mill. Capital stock \$30,000.

W. J. Forbes of Duluth has been appointed receiver of the Northern Pacific Elevator Company and the Red River Valley-Elevator Company.

The Bonus-Milner Milling Company of Sioux City, Ia., will build a few grain warehouses along the Missouri River in Charles Mix Co., S. D.

Two elevators at Nora and Waddams Grove, Ill., owned by one dealer, received late this spring and before June 7 over 30,000 bushels of oats.

The farmers of Northwestern Iowa are separating the mustard seed that is usually found mixed with their flax. It is sold for about \$2 per bushel.

The elevators at Buffalo, N. Y., are full of grain and running over. Receipts by boat from the West are large, but the demand from the East is small.

Obenchain Bros. of McKinney, Tex., have recently bought one Little Victor Corn Cleaner of the Barnard & Leas Manufacturing Company of Moline, Ill.

John Kerr of Rushville, Ill., has recently bought a Little Victor Corn Sheller and Cleaner of the Barnard & Leas Manufacturing Company of Moline, Ill.

Baldwin & Co. of Pine Village, Ind., have recently bought one No. 0 Victor Corn Sheller of the Barnard & Leas Manufacturing Company of Moline, Ill.

Josiah Dow & Co. of Shelby, Ia., have lately bought an outfit of elevator machinery made by the Barnard & Leas Manufacturing Company of Moline, Ill.

The elevators at Duluth and Superior shipped this spring up to June 1 7,462,762 bushels of grain, against 8,897,416 bushels during the same time last year.

A conveyor is being built between elevators "X" and "A" at Superior, Wis. In the meantime grain is being transferred from "X" to "A" in railroad cars.

The Union Elevator Company of Minneapolis, Minn., is putting in fire apparatus, by which it is expected to reduce the rate of insurance from 24 cents to 2½ cents.

Phillip Rahm of New Orleans, La., has recently bought a No. 23 Barnard Elevator Separator of the Barnard & Leas Manufacturing Company of Moline, Ill.

William Finn of Sedgewick, Kan., has recently bought one Willford three-roller Mill of the Willford & Northway Manufacturing Company, Minneapolis, Minn.

A grain warehouse is being built at Walla Walla, Wash., by Messrs. W. P. Reser, Charles Swesa and E. A. Reser, who have organized a company to deal in grain.

Grain firms dissolving partnership and companies retiring from business should make it known through the columns of the AMERICAN ELEVATOR AND GRAIN TRADE.

George Graves of Okarche, Oklahoma, has recently purchased a complete outfit of elevator machinery of the Barnard & Leas Manufacturing Company of Moline, Ill.

The Farmers' Elevator Company of Hoopeston, Ill., has recently bought one Victor Corn Sheller of the Barnard & Leas Manufacturing Company of Moline, Ill.

Seeley, Son & Co., elevator architects and builders, of Fremont, Neb., are building a 25,000-bushel elevator at Henrietta, Tex., for D. D. McMillan & Sons of Fort Worth.

The farmers' elevator company which was recently organized at St. Peter, Minn., has been incorporated and will proceed to build an elevator and start in the grain business.

W. J. Skidmore of Skidmore, Mo., has recently bought of the Willford & Northway Manufacturing Company of Minneapolis, Minn., one No. 1 Willford three-roller Mill.

F. L. Churchill of Fairbury, Ill., has recently bought of the Willford & Northway Manufacturing Company of Minneapolis, Minn., one No. 1 Willford three-roller Mill.

The Harris Elevator Company has been incorporated at Sibley, Ia., to buy and sell grain. Capital stock, \$25,000; incorporators, G. T. Harris, J. E. Harris and M. Harris.

The "Grand Trunk Elevator" at Toronto, Ont., contains 130,000 bushels of grain, and the officials have asked the owners to inspect it weekly so as not to allow it to heat.

The Barnard & Leas Manufacturing Company of Moline, Ill., has recently furnished J. M. Mills of Kingfisher, Ok. Ter., a complete outfit of machinery for a grain elevator.

The State Elevator Company has been incorporated at Minneapolis, Minn., to build and operate elevators and warehouses and buy and sell grain, etc. Capital stock, \$100,000, divided into 1,000 shares of \$100 each.

Incorporators, William Wheeler, Oliver P. Carter, Norton E. Carter, Charles F. Wheeler and Charles McCreeve. Charles F. Wheeler is secretary and treasurer.

Duncan Hollinger & Co., dealers in grain and live stock at Atlanta, Ia., have been succeeded by L. T. Spangler and F. W. Brington, under the firm name of Spangler and Brington.

W. W. & L. M. Pope of East Monroe, O., have recently purchased one No. 0 Barnard Horizontal Adjustable Scourer of the Barnard & Leas Manufacturing Company of Moline, Ill.

The Norfolk Wharf, Warehouse & Terminal Company has been incorporated at Norfolk, Va., with Decatur Axtell, president; C. E. Wellford, secretary, and T. O. Barbour, treasurer.

The contract for building their 750,000-bushel elevator at Minneapolis, Minn., was recently awarded by Osborne & McMillan to the Barnett & Record Company of Minneapolis and Duluth.

Scrubby Bros. & Co., dealers in grain and farm machinery at Chillicothe, Mo., have been succeeded by the Scrubby Bros. Grain & Implement Company, which was recently incorporated.

An elevator with a marine leg is badly needed at the head of Lake Superior. A whaleback had to discharge its cargo there, and the only means at hand were a gang of men with buckets.

The Metcalf-Macdonald Company, architects and engineers of Chicago, have just been awarded the contract to build a large elevator at St. Louis, Mo., for the United Elevator Company.

Canada has ten distilleries which use about one million bushels of grain and produce 3,498,231 gallons of proof-spirits annually; also 135 breweries which use a million bushels of grain annually.

The Coffeyville Elevator Company of Coffeyville, Kan., and the Farmers' Mutual Elevator Association of Ong, Neb., are recent purchasers of scales equipped with the Demuth Patent Check Beams.

Grain dealers visiting Chicago should call at the office of the AMERICAN ELEVATOR AND GRAIN TRADE and receive free of charge a guide to the city of Chicago and World's Columbian Exposition.

The Anchor Grain Company has been incorporated at Anchor, McLean Co., Ill., to deal in grain. Capital stock, \$5,000; incorporators, Amos B. Means, John F. Ward, O. A. Means and Henry George.

Charles Stager & Co., grain dealers at Toledo, O., have been succeeded by Charles Stager under the same firm name, his special partners, H. W. and Kate Koelker, having withdrawn their capital.

D. D. McMillan & Sons of Fort Worth, Tex., are building an elevator of 25,000 bushels' capacity at Seymour, Tex. Seeley, Son & Co., architects and builders, of Fremont, Neb., are doing the work.

Campbell, Thomas & Co. of Frankfort, Ind., have recently bought one No. 5 Barnard Receiving Separator, and one No. 2 Cornwall Corn Cleaner of the Barnard & Leas Manufacturing Company of Moline, Ill.

W. I. Guffin will place a gasoline engine in his grain elevator at Paw Paw, Ill. Besides furnishing power to run the elevator, the engine will be used to pump water from a six-inch well into the railroad water tank.

Fred Mason, grain dealer at Hurley, Wis., is being sued for damages by F. D. Day for alleged misrepresentation of Day's financial standing, whereby his character and credit were injured to the extent of \$5,000.

J. T. Fuller of Savanna, Ill., is the happy possessor of one of the biggest warehouse scourers ever built. Its capacity is 1,000 bushels, and it was furnished him by the Barnard & Leas Manufacturing Company of Moline, Ill.

The Texas Grain & Provision Company has been incorporated at Waco, Tex. Capital stock, \$50,000; incorporators, Frank Henderson and Brook Smith of Brownwood, and W. R. Davidson, M. Guinan and B. B. Davidson.

The grain trade of Superior, Wis., for the month of May included 718,977 bushels inspected in and 2,549,735 bushels wheat and 2,891,078 bushels corn shipped out. Two carloads were inspected out; the remainder went by water.

The Barnett & Record Co., of Minneapolis, Minn., which has been building several elevators and mills at Superior, Wis., will wind up its operations at that point by constructing docks for the Youghiogheny & Lehigh Coal Company.

Winter storage on grain in elevators at Fort William and Port Arthur has this year been extended until June 10 instead of expiring with June 1, as formerly. This was done on account of the late opening of navigation on Lake Superior.

The Manhattan Company is extensively engaged in the malting business at Manhattan, Mont. In 1890 the company bought 10,000 acres of land in the Gallatin valley, and put in 1,300 acres of barley the first year. Last year the acreage was increased to 6,000, and this

season 10,000 acres will be seeded with barley. Their malt house has a capacity of 250,000 bushels, and their elevator a storage capacity of 275,000 bushels. The finished malt is shipped to Eastern brewers.

The elevator at Milmine, Ill., of the Shellabarger Mill & Elevator Company, received in one day recently 175 wagon loads of corn and eleven loads of oats, equal to 7,301 bushels of corn and 800 bushels of oats, which is certainly a big day's work.

An export shipment of 100 tons of hay was recently made at Baltimore, Md., by Gill & Fisher, grain dealers. This is a trial shipment to France. If the sample suits more will follow, as the hay crop in that country was almost a total failure owing to drought.

The Northern Pacific Elevator Company is financially embarrassed. The elevators of the company in North Dakota, numbering about fifty, have been attached by banks at Montreal, Minneapolis and Duluth. A receiver will be appointed. The capital stock of the company is \$650,000.

The suit in admiralty of L. S. Sullivan against the Lake Superior Elevator Company at Superior, Wis., for \$1,200 damages was heard recently in the United States court. While tied up at one of defendant's elevators the steamer D. W. Rust was damaged by the falling on its deck of a conveyor gallery.

The Red Bud Elevator & Warehouse Company has been incorporated at Red Bud, Randolph county, Ill., to deal in farm products, live stock and agricultural implements. Capital stock, \$5,000; incorporators, William A. Dinan, Joseph Roscow, Medart Heck, Crestof Godelman and John T. McCaffrey.

Kellogg & Forsyth, commission grain dealers at Chicago, Ill., failed June 2, owing to the drop in wheat. The firm was started a month ago by A. G. Kellogg and John J. Forsyth, with \$10,000 capital. They bought largely of everything, lost all they had, and owe \$8,000 besides to other Board of Trade firms.

The plans for the "Canadian Pacific Elevator" at Winnipeg, Man., have been prepared. Most of the material has been gotten ready, but the officials of the railway are waiting to see how the new crop is going to turn out, as they do not want to expend \$750,000 on a large grain elevator and have it only partly used.

The failure of Kendall & Smith, grain dealers at Lincoln, Neb., is a worse one than was at first supposed. The liabilities are \$300,000, with small assets. The firm had elevators in Nebraska, Kansas and Missouri. These were sold the day before the failure to Harris Bros. & Co. of Omaha, who continued their operation as usual.

Duluth is shipping wheat to Chicago and Milwaukee by vessel for the first time in many years. Two cargoes were recently shipped to millers at Milwaukee, and lately the steamer W. H. Gratwick arrived at Chicago with a cargo of wheat, which was discharged at the Illinois Central Elevator. The freight rate is 3 cents a bushel, Duluth to Chicago.

J. D. Tobey, grain dealer, has brought suit in the Circuit Court at Chicago against Ernst Hess, the elevator man, for \$50,000 damages. He owed \$8,500 to Hess, and alleges that he gave a deed to some property in payment. Hess sued him on the ground that this was merely a security, and the unwarranted suit injured his credit to the extent of \$50,000.

Private bids will be received at Glen Elder for the sale of the Alliance elevator at that point. There is a big mess of rottenness, apparently, connected with the management of the institution. Several farmers are in the hole for hundreds of bushels of grain, for which they have never received a penny, and probably never will get a cent.—(Gazette, Beloit, Kan.)

Gantz, Barnes & Co., grain dealers and shippers from Fairbury and Weston, Ill., have been succeeded by S. M. Barnes. Having purchased the interests of his partners, Gantz brothers, Mr. Barnes is now sole owner of the elevators at Fairbury and Weston. He will retain the efficient services of Mr. E. Keller, who was with the old firm since its organization.

The Eastern Elevating Company has been incorporated at Buffalo, N. Y. Capital stock, \$1,000,000; incorporators, John C. Graves, W. P. Northrup and George A. Lee. They are going to take some business away from the "trust," known as the Western Elevating Company. The contract for the building has been let to James Stewart & Co. of St. Louis, Mo.

Frederick Einstman, grain dealer at Jacksonville, Ill., failed May 13, making an assignment to Joseph H. Briggs. He also did business at Chapin, Concord and Meredosia. The failure was caused by the recent destruction of his flour mill at Meredosia by a boiler explosion. Owing to the tightness of the money market he could not loan money to tide him over this loss. Liabilities \$13,599; assets \$32,759.

Frank M. Cockrell, grain dealer and elevator man of Dallas, Tex., filed a deed of trust on the afternoon of May 20 to Henry Martyns, his bookkeeper, for the benefit of his numerous creditors. Liabilities \$100,000; assets \$150,000. His failure was totally unexpected and produced a sensation in business circles. Mr. Cockrell has the sympathy of the community,

who have confidence in his integrity, and if the assets, which are chiefly real estate, could be realized upon, everyone would be paid in full, with a handsome balance for himself. Cockrell Bros. are secured by a separate deed for \$20,000.

The Canadian Pacific Railway has granted a further extension of the time for winter storage from June 10 to June 17, in the grain elevators at Port William, Man. When navigation opened it was discovered that a bar had formed at the mouth of the river, preventing the loading of full cargoes, and vessels have had to finish loading at Port Arthur, the grain being transferred from one elevator to the other by rail.

H. H. Sindt & Co. of Durant, Ia., will rebuild their elevator, which was burned several months ago. The capacity of the new house is to be 40,000 to 50,000 bushels. The citizens of the town and its vicinity had a high regard for the unfortunate firm and sympathized with them in the hour of their misfortune. As an evidence of their esteem and an aid in rebuilding, the citizens recently tendered the firm the sum of \$2,400, which was accepted.

The suit of Thomas J. Thompson against the Star Elevator Company of Minneapolis, Minn., for \$65,000 damages on account of the elevator falling on and crushing his feed mill, was recently decided by the jury in favor of Thompson, who secured a verdict for \$20,340. The elevator company will appeal the case on the ground that the verdict was not in accordance with Judge Smith's charge to the jury, which explicitly stated that proof of negligence must be offered.

Grain insurance rates on lake cargoes have been cut by the Chicago Board of Marine Underwriters. The North America Company caused the cut. This company could see no reason why grain insurance should be 50 cents while flour was insured at 10 and 12 cents per \$100, and accordingly put down the rate from 50 to 30 cents on grain from Chicago to Buffalo. This action caused the underwriters to order a like reduction, and grain insurance is likely to be low all summer.

E. T. Cruse, the grain dealer of Allegan, Mich., has been in the business at that point since 1877 and is one of the heaviest dealers there. His elevator, located on three railroads, has a capacity for 20,000 bushels of grain, and is equipped with suitable machinery, driven by a steam engine of 12-horse power. Mr. Cruse buys grain from all parts of Allegan county and ships east to Toledo, Buffalo, Philadelphia, etc. His baled hay goes to Boston. He handles clover seed and wool in season.

The board of railroad and warehouse commissioners of Minnesota has been pushing the matter of building a state elevator at Duluth. Numerous proposals, offering sites, were submitted, but no decision has as yet been announced. The present plan is to build a house with 500,000 bushels' capacity in such a way that annexes can be erected later to be operated by the same machinery, as the funds available are not sufficient to cover the cost of a first-class elevator of the size contemplated by the legislature.

When the grain in the "Santa Fe Elevator" at Argentine, Kan., was recently weighed over it was found that a shortage of nearly thirty carloads existed. The weighing was done under the supervision of Superintendent M. F. Nutter, and showed a total of 283,000 bushels, whereas the books of the Midland Elevator Company credited the elevator with 3,000,000 bushels. It is not known what caused the discrepancy. The grain has been reweighed and the books re-examined without bringing to light any error.

Abner L. Backus & Sons, grain dealers at Toledo, O., failed June 10. Alexander Backus was appointed receiver for the firm, and for the Union Elevator & Transportation Company, of which A. L. Backus is president; Samuel Backus, vice-president, and E. L. Deffenbaugh, secretary. It is alleged that the failure was caused by the discrimination of the members of the Toledo Produce Exchange against the "Union Elevator," and the circulation of damaging stories about A. L. Backus & Sons. A month ago suit was brought by the Union Elevator and Transportation Company against the members of the exchange for heavy damages on account of the discrimination. The firms had been doing a large and paying business. They once ran a line of boats on the Miami and Erie Canal, and now own a line of grain cars. Liabilities about \$600,000, assets unknown. The direct cause of the failure of the two firms was the stringent money market.

The Kansas Grain Company of Kansas City, Mo., and Hutchinson, Kan., failed on the morning of June 5. The liabilities are heavy, but it is thought that the company will pay 100 cents on the dollar. The Kansas Grain Company was formerly known as the Kansas Grain & Live Stock Company, but changed its name in June, 1892. It is said it purchases more grain from producers than any other firm in the world. It has 106 elevators in Kansas, located along the lines of the Atchison, Topeka & Santa Fe, the Missouri Pacific and Rock Island Railways. The largest of the company's elevators are located at Hutchinson, Newton, Douglass, Caldwell, McPherson, Conway, Galoa, Windom, Sterling, Sylvia, Belle Plaine, Coldwater, Kingsley, Concordia, Augusta, Mulvane, Kiowa and

Ellinwood. The elevators represent an investment of \$151,000. The capital stock of the company is \$50,000 fully paid up and the surplus is placed at \$30,000. H. M. Kirkpatrick is secretary and treasurer, and T. J. Templar, president. Mr. Kirkpatrick says the stringency in money prevented the company from realizing on its warehouse receipts, which were depended upon to meet maturing obligations.

Knowles & Co., commission grain dealers on the Milwaukee Chamber of Commerce, failed May 31. Their open trades were turned over to William Bigelow & Co. The firm of Knowles & Co. was organized Feb. 1, 1891, and consists of George Knowles, Jr., Charles and Francis Knowles, all sons of George Knowles, Sr., who was for thirty years at the head of a commission firm known as Knowles & Co. The firm also dealt in stocks. Their business had been getting smaller for several months past, but expenses continued large and the failure was only a question of time.

Latest Decisions.

Advances by Insurer to Shipper.

Certain fully insured cotton having been destroyed as claimed, through the negligence of a carrier, the insurer advanced the value thereof to the owner, as a loan without interest, with the understanding that the latter should sue the carrier, and, if successful, repay the loan, and if unsuccessful, retain the money as payment of the insurance. This arrangement was no bar to a libel by the owner against the carrier.—*The Guiding Star, District Court S. D. Ohio, 53 Fed. Rep. 936.*

Non-Negotiable Bills of Lading.

The words "non-negotiable" stamped across the face of a bill of lading deprive it of the attributes given bills of lading by statute. Such was the decision of Judge Smith of the Court of Appeals at Kansas City, Mo., recently in the suit of A. Dymock and the Hazelton Grain Company against the Missouri, Kansas & Texas Railway Company. The suit is one of the many growing out of the failure several years ago of the Currier Grain Commission Company. The latter negotiated bills of lading with the Midland National bank and then sought to avoid liability on them.

Legality of "Future" Contracts.

No more important figure affecting business relations has been rendered for a long time than that handed down by the Supreme Court of the United States through Associate Justice Jackson in the case of Bibb vs. Allen et al., which came up on appeal from the Federal courts in Alabama. In this case it appeared that the defendants in error, who were citizens of New York and Tennessee, doing business in the city of New York as brokers, commission merchants and cotton factors, brought suit to recover \$20,000 as commissions for services rendered and money advanced on sales of cotton for future delivery according to the rules and regulations of the New York Cotton Exchange. The plaintiff in error set up in defense the statute of the state of New York against wagers, bets and gambling transactions, and alleged that the services performed by the defendants in error consisted in the making of wagers on the price of cotton, and that the money paid by them was in the settlement of losses on those wagers. The defendants in error recovered a judgment which had just been affirmed by the Supreme Court of the United States.

Judge Jackson, in rendering the decision, makes the following clear statement of the law governing the case: "Upon the assignment of error, which presents the question whether the transactions in which the parties were engaged were illegal, because they were wagering contracts under the New York statute against wagers, bets, etc., the evidence in the case clearly fails to make out such a defense. In entering into their arrangement it is shown that there was no agreement or understanding between the plaintiffs and defendants that the cotton sold for future delivery was not in fact to be actually delivered. It is not questioned that if the transactions in which the parties are engaged are illegal the agent cannot recover either commissions for services rendered therein or for advances or disbursements by him for his principal; the reason for this rule being that in such illegal transactions of which the agent has knowledge he is regarded as particeps criminis, which precludes him from the recovery of either commissions or advances. But the facts of this case do not bring the transactions in question within the operation of that principle, for the evidence set out in the bill of exceptions fails to show that either party to the transactions intended the same as wagering or gambling speculations. In addition to this, it is shown that the rules and regulations of the New York Cotton Exchange recognized no contracts except for the sale and purchase of cotton to be actually delivered. These rules and regulations impose upon the seller the obligation to deliver the cotton sold, and upon the purchaser the obligation to receive it, except in certain specified cases which have no application to the present case."

PRESS COMMENT.

CAUSE OF LOW PRICES.

Now that the new harvest is near at hand and the old stock of wheat in sight is very large, it is natural that prices should fall. Add to this the condition of the money market, which leaves the speculator little leeway and renders cash wheat a luxury which he cannot well afford, and the reason for the coming of the lowest price for cash wheat in thirty years is readily seen. That there must be a sharp rally from these extraordinarily low prices is the natural belief of those who study the markets.—*Chicago Daily News.*

SHIPPED HAY ON THEIR OWN ACCOUNT.

Although shippers have met with disappointments during the past season, on the whole the export trade has been a source of considerable profit to farmers, for had there been no foreign outlet the large yield of 1892 would not have realized one-half what it has. Farmers, however, made a great mistake when they undertook to go past exporters and ship on their own account, as by that unwise step they caused an immense quantity of hay to arrive on the other side at one and the same time, resulting in losses to themselves as well as to shipper.—*Montreal Trade Bulletin.*

STATE ELEVATORS.

The scheme of a state grain elevator, which has been talked of in several legislatures, has actually been enacted in Minnesota, and, until the act is repealed, that state is to have a state warehouse commission to run an elevator of 2,500,000 bushels capacity and do everything necessary to the business. Minnesota's troubles will begin when complaints pour in because the state weighers do not make a cargo "hold out" and the warehouse commission does not secure more than the market price. State socialism is bound to have its fling just at present, and the reaction will come all the sooner through the South Carolina and Minnesota experiments.—*Albany Argus.*

FARMERS AS SPECULATORS.

"Talk about speculators," said a produce dealer the other day; "there isn't a greater speculator out than the farmer. If the price of any product goes up he never wants to sell; no matter how high the price, he always wants more. After the price begins to go down he wants to sell, and usually gets a lower price than he might have obtained." Unfortunately there is too much of truth in this statement. The dealer in question cited several instances in support of his statement. Every seller wishes to get all possible for his wares. This is natural and right, but it isn't always easy to tell just when the right point has been reached. It is generally better to sell on a rising than on a falling market. When an unusual high figure has been attained, it isn't reasonable to suppose that that price will be long sustained.—*Rural New Yorker.*

CALAMITY BREEDERS BUSY.

The calamity breeders and alarmists are very busy at present. They are predicting all sorts of troublous times and give as the main reason "over supply" and "tight money." They say the reason wheat is going down is because traders cannot borrow the money necessary to buy it with. There is probably as much money now in this country as there ever was and people who are working on a sound business basis get along very well. It is the people who have been able to borrow money heretofore on inflated securities that suffer most now. The failures, which in reality ought to cut very little figure in wheat or flour prices are scattered broadcast by these alarmists and have more or less of bad effect. They encourage short sellers to renewed activity and scare out many investors. Prices of wheat and flour ought to go down according to the demand.—*Minneapolis Market Record.*

RECOVERY OF OVERCHARGES.

It appears there is a statute in Kansas which authorized the recovery of three times the amount of an overcharge, with attorney's fees and costs, by a shipper who may be subjected thereto by a common carrier. This has been held in the Supreme Court of Kansas to be a "better remedy than the common law," which provides that all charges for transportation must be reasonable, and that all excess charged over reasonable rates must be refunded. There is no manner of doubt but that the statute is better than the common law—for the shipper. It was undoubtedly framed under the supposition that the "grasping, soulless corporations" known as railroad companies were in the habit of estimating the pecuniary resources of each individual shipper and making their charges accordingly. It can be shown in Kansas, as elsewhere, that while the aggregate number of overcharges is quite large, the proportion of overcharges to the number of shipments made is almost infinitesimal, and largely owing to the errors of clerks and the conditions naturally attending a rapidly developed and growing system of transportation.—*Railway Review.*

Fires, Casualties, Etc.

A grain elevator at Johnson, Minn., was burned May 17.

The "Bluff Brewery" at Quincy, Ill., was burned recently.

The elevator at Nichols, Ia., collapsed recently. Loss \$2,000.

The "Hope Rice Mill" at New Orleans, La., was burned June 1.

The Home Brewing Company of New Orleans, La., recently suffered loss by fire.

An elevator at Rossville, Ill., was recently burned, with 4,000 bushels of wheat.

F. L. Passon & Son, seed dealers at Portland, Ore., recently sustained loss by fire.

Milbourn & McGinnis, grain dealers at Minden, Neb., recently suffered loss by fire.

Foster & Hobb's warehouse at Tilsonburg, Ont., was ruined by a terrific windstorm May 23.

Osborn & McMillan's elevator at Maple Lake, Minn., was burned June 8 with 20,000 bushels of wheat.

Lewis Cline's grain elevator at Nelson, Mo., was burned on the night of May 29, with 2,700 bushels of corn.

Clarence R. Merrill's grain, hay and flour establishment at Manchester, N. H., was burned May 12. Loss \$25,000.

Stevensville, Carpenter & Co. of Evansville, Wis., recently had their grain warehouse damaged by fire to the extent of \$1,700.

The Johnson-Lande Co., dealers in broom corn at Chicago, Ill., had their stock destroyed by fire June 8. Loss, \$40,000; insurance, \$25,000.

Ormsby McHarg's elevator at Brinsmade, N. D., was burned recently. It is only a year since he built the house. No grain was stored in the building.

Kohlman & Davidson's grain warehouse at Houston, Tex., was struck by lightning recently and burned. Loss on stock \$4,000; insurance \$2,300.

Calvin D. Bissell, head bookkeeper for the Cargill Elevator Company of Winona, shot himself recently at the Chamber of Commerce in Minneapolis, Minn.

Allison & Van Epp's elevator at Brookings, S. D., was burned May 12, with 6,000 bushels of wheat and 3,000 bushels of flax. Loss \$10,000; small insurance.

An elevator containing 5,000 bushels of wheat at West Plains, Mo., was burned May 13 with the flour mill of Bennett & Reese. Loss \$30,000; partially insured.

Frank A. Burnell's grain warehouse at Denver, Colo., was destroyed by an incendiary fire on the evening of May 22. Several carloads of grain, hay and salt were destroyed.

Maloy's grain elevator at Bascom, O., was blown down during the windstorm of May 23. The loss is small, as the building was an old frame and had not been used for six months.

The "Minneapolis and Northern Elevator" at Fargo, N. D., was destroyed in the conflagration which visited that city recently. The contents, 100,000 bushels of wheat, are a total loss.

The "Union Elevator" of the Hudnut Milling Company at Terre Haute, Ind., was burned on the night of May 15 at 11 o'clock. The contents were principally corn and amounted to 20,000 bushels. Loss \$40,000.

Marion Matthews' grain elevator at Adams, Ind., was burned on the morning of May 16, with 2,000 bushels of wheat and 500 bushels of corn. An explosion of natural gas caused the fire. Loss \$5,000; partially insured.

Peck Bros', big elevator and mill at Monticello, Ill., narrowly escaped destruction by fire on May 30. The blaze was seen at 9 o'clock A. M., and after hard work the main body of the elevator was saved. The loss is covered by insurance.

Gustave Victorson, who has been operating in wheat on the Chicago Board of Trade with heavy loss, committed suicide recently. He was a native of Russia, and went to Chicago from New York, where a couple of years ago he was a large grain exporter.

A tornado demolished E. D. Tillson's grain elevator at Tilsonburg, Ont., on the morning of May 23. The wind caught the west corner, knocking out about fifty feet of that side and as much of the east side. Two men were on the bottom floor of the elevator. Henry Joyce was filling barrels with split peas and A. Snively had just driven in his team. Joyce felt the wall giving way and rushed out of the east door just

as the mass of bricks fell, and was struck on the head by the falling debris, being killed instantly. Snively rushed to his rescue, but found his comrade quite dead. Joyce leaves a wife. Mr. Tillson's loss is about \$3,000.

The east end of J. W. Rice's grain warehouse at Mitchell, S. D., fell out recently, causing \$100 loss. Rain had loosened the ground, causing the supports of that end of the building to settle. Over one thousand bushels of wheat was spilled out.

The Atlantic Elevator Company's flat house at Maple Lake, Minn., was burned on the night following June 8, with 2,000 bushels of wheat and a carload of millstuffs. An elevator was also burned at the same time. The fire is supposed to have been of incendiary origin.

L. Butterfield's grain and feed warehouse at Denver, Colo., was destroyed by fire on the evening of May 14. Besides a quantity of grain, Mr. Butterfield had 900 tons of hay and 1,000 sacks of flour in store, all of which is a total loss. Nothing was saved. Loss \$25,000; insurance \$20,000.

J. & C. McCune, dealers in grain, hay and feed at Pittsburg, Pa., suffered heavy loss by fire May 15. The flames were discovered at 10:30 o'clock on the third floor, which was stocked with hay. This hay was wet when stored and hence it is believed that spontaneous combustion ensued. Their building is new and valued at \$30,000, but the total damage to the establishment does not exceed \$20,000, which is fully covered by insurance.

WATERWAYS

Call at our office and get free a copy of our Souvenir Guide.

A freight steamer recently arrived at Chicago from Norway.

The steadiness of rail rates on grain from Buffalo to New York has given the Erie Canal a season of prosperity.

The steamers running on the Missouri River are taking large quantities of grain from South Dakota to Sioux City, Ia.

The steel steamer Xania of Bergen, Norway, arrived at Chicago recently and will return with a cargo of wheat and flour.

The Cornwall, Beauharnois and Lachine Canals having been opened, the route from the great lakes to Montreal can be used by Western shippers.

The first cargo of wheat ever shipped from Duluth to Milwaukee for years was taken out by the steamer Omaha May 20. It amounted to 60,000 bushels.

The new channel at the Galops Rapids on the St. Lawrence River, which was constructed at great expense by the government, is considered unsafe, so the pilots and grain barges continue to use the old channel.

The Montreal Transportation Company's barge Wheatbin struck an abutment in the Cornwall Canal recently, wetting the 18,000 bushels of wheat composing the cargo, which is owned by A. G. Thompson of Montreal.

A number of the Kingston & Montreal Forwarding Company's barges left Ogdensburg one morning recently and had their grain cargoes aboard vessels at Montreal by the following evening. This rapid transit is a credit to the company, and adds to the popularity of that route.

The Suez Canal traffic decreased last year, being 986,748 tons less than in 1891. The dues paid by vessels last year amounted to 74,452,436 francs, against 83,422,101 francs in 1891. The number of vessels which passed through the canal in 1892 was 3,559, against 4,207 in 1891 and 3,380 in 1890.

As there is only nine feet of water in the Dominion Canals, the Collins Bay Rafting Company has constructed two steel cylinders, which are placed alongside and under the vessel that is to be lifted and are then pumped empty of water, causing the draft to be reduced so the vessel can safely be floated through in nine feet of water.

An aqueduct has been projected to extend from Georgian Bay on the east shore of Lake Huron to the city of Toronto, thus furnishing a short cut from that lake to Lake Ontario. Such an aqueduct with the proposed ship canal in connection would prove very useful and would capture the export grain trade of the West, but the enormous cost is a great obstacle.

The elevators at Buffalo which handle grain for Erie Canal boats are all full, while the railroad houses are comparatively empty. The reason for this state of affairs is that the boats, on account of bad weather and slow unloading, have been unable to take the grain as fast as the lake vessels unloaded, while

the railroad elevators refused to handle canal grain so as to embarrass the boatmen.

A canal fourteen miles long and costing \$3,000,000 will be cut in Ontario to connect Lakes St. Clair and Erie. Capitalists of New York and Minneapolis are supplying the funds, and C. C. Wyatt, a skilled engineer, will superintend the construction. Mr. Wyatt is buying options of purchase on the right of way. So much wild talk has been indulged in proposing canals at various points along the lakes that it is refreshing to hear of one actually being constructed. May success attend the project.

The government has taken bids for the construction of the great lock on the Tennessee River at Colbert Shoals, near Florence, Ala. The bids ranged from \$305,767 to \$624,034. The lock is to be 575 feet long, 80 feet wide, with a lift of 25 feet. When completed navigation will be open on the Tennessee River, the Mussel Shoals Canal having been finished two years ago. The lumber, coal and iron along that river can then be shipped by water to the west, where grain cargoes can be secured as a return load.

A vessel that runs on land as well as water has been invented in Canada, and a dozen of them are now in use in the lumber districts. The boats have steel runners for moving overland. A wire cable is attached to a tree half a mile off and the engine winds it up on a drum, drawing the boat ahead. In water the boat is propelled by side wheels at the rate of six miles an hour. An amphibious craft of this style, it is said, would be found very useful on some of our western rivers into which the government has poured barrels of money in a vain endeavor to render them navigable.

Samuel D. Pace, United States Consul at Port Sarnia, Ont., claims the free use of the Canadian canal system would be of no great value to American commerce, pointing out that even the Welland, the largest of the Dominion canals, would have to be deepened from 14 to 17 feet and lengthened out from 270 to 320 feet to permit the passage of the late built American craft; while some of the St. Lawrence canals have a depth of only 8½ feet. The tax of 20 cents a ton on American vessels passing through the Welland Canal, he holds, should be abolished.

The great lakes are the birthplace of many novel vessels. Among the curious types now in use are the whaleback, which has been described in these columns, the straightback and the monitor. These all are freighters. The two last mentioned are of later construction than the whaleback. Many believe that these innovations have come to stay, and certainly they have many points in their favor. The largest grain carrier at the present day on the lakes is the steamer Selwyn Eddy, which belongs to the straight-back type, and was put in commission for the first time this season. The Yuma, of the monitor type, follows close after in carrying capacity.

The Rio Mar Navigation Company was recently incorporated at St. Louis, Mo., with \$300,000 capital stock. This company has bought the stock of the Lucas Ship Company, and will at once construct a vessel under Mr. Lucas' patents for the freight and passenger traffic between Mississippi River points and ports in Mexico, Central America, the West Indies and South America. The incorporators of the company are women who reside in Missouri. Margaret E. A. McClure is president, and Mrs. Rose Wright Fanning, the well known educator, is another officer. The Lucas ship is provided with an adjustable keel which is let down into the water when sailing the sea and drawn up when navigating rivers.

On a recent trip from Chicago to Buffalo the steamer Selwyn Eddy damaged its cargo of oats by fire and smoke to the extent of \$10,072, as appraised by the insurance adjusters. Only 300 bushels of the grain was burned, the greater part of the loss having been caused by smoke. Oats are so light that in order to take a sufficient tonnage the grain was piled up to the deck beams above the hold, completely covering the electric lights. These lights were left burning after the grain had been loaded. Ordinarily the heat radiated from the incandescent carbon is dissipated in the atmosphere, but surrounded as they were with the non-conducting oats the heat gradually increased until the grain was charred and finally kindled. Such is the conclusion reached by the electrical experts who examined the vessel at Buffalo.

OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

M. H. Long, Elida, Ohio.
J. S. Harshman, Enon, Ohio.
W. A. Watson, St. Joseph, Ill.
A. F. Brown, Concordia, Kan.
Col. Charles J. Murphy, New York, N. Y.
H. L. Knight, Superintendent E. H. Pease Mfg. Co., Racine, Wis.
F. L. Cranson, of Huntley, Cranson & Hammond, Silver Creek, N. Y.
James L. Wheeler, Decatur, Ill., representing S. Howes, Silver Creek, N. Y.

THE EXCHANGES

Memberships in the Chicago Board of Trade are selling at \$1,025.

The Flour Exchange of Superior, Wis., has let the contract for its new building.

Certificates of membership in the New York Produce Exchange are cheaper, selling now at \$650.

The St. Louis Merchants' Exchange has voted to expend the sum of \$150,000 in remodeling its present home and making some needed improvements.

The Minneapolis Chamber of Commerce is looking for a secretary to take the place of C. C. Sturtevant, deceased. The salary of that officer has been \$2,500 per annum, which it is proposed to increase to \$3,000 or more.

The proposed call board of the Montreal Corn Exchange will soon be established. Rules and regulations for buyers and sellers of Canadian grain are being prepared, to go into effect when the call board is opened.

The new building of the Detroit Chamber of Commerce will be a fine structure. The accepted plans show an eleven-story building. The floors above the fourth will be occupied with offices; the floors below are planned for the use of the chamber. Five passenger elevators will run from top to bottom.

The New York Produce Exchange elected officers as follows at the annual meeting June 5: Evan Thomas, president; Alfred Romer, vice-president; E. C. Rice, treasurer. The managers (two years) are Henry A. McGee, J. S. Thayer, J. M. Martin, John Orpe, E. T. Barrows, Grenvil Perrin; trustee of gratuity fund (to serve three years), Albert H. Brown.

OBITUARY

A. F. Blacksheare, dealer in grain and hay at Jennings, La., is dead.

Leonard Shelters, dealer in grain and hay at Manchester, N. H., is dead.

David H. Lincoln, an old member of the Chicago Board of Trade, and its president in 1877, died recently.

A. A. Turner, elevator man of Minnesota, died at Wadena, June 10, of brain fever, caused by worry and overwork.

William T. Walker, an old member of the Toledo Produce Exchange, died recently. For thirty years he was prominent in business circles, first in the carrying trade and later as a grain merchant. He held many positions of public trust in the gift of the people.

Henry C. Stimson, a member of the Chicago Board of Trade, died at Evanston, Ill., May 24, aged 43 years. He was a son of William Stimson, grain dealer of Buffalo, N. Y. At the age of 22 he went to Chicago and joined H. W. Austin on the Board of Trade. He leaves a widow and one son.

Samuel T. Hooker, one of the old pioneers of the grain trade, died at Milwaukee, Wis., May 31, aged 77 years. He was born at Northampton, N. Y., and in 1855 went to Milwaukee, where he was actively engaged in the grain business on the Chamber of Commerce until three years ago, when ill health compelled his retirement. He was president of the chamber in 1862 and 1863, and has presided at every annual caucus for twenty-five years.

Charles A. King of C. A. King & Co., commission grain dealers of Toledo, O., and a member of the Produce Exchange, died recently aged 76 years. He was born at Sackett's Harbor, N. Y., being one of twelve children, of whom only one survives him. His integrity and devotion to business brought him success in life, but he did not live for himself alone. He once represented his district in the Ohio Senate, and was chosen by his party to be their candidate for Congress.

C. C. Sturtevant, the veteran secretary of the Minneapolis Chamber of Commerce, passed away at noon May 30. Mr. Sturtevant was born in Litchfield, Mass., about eighty years ago, and has for twenty years resided in Minneapolis, where he became secretary of the Chamber of Commerce in 1882. Mr. Sturtevant went to Akron, O., when eleven years of age, and, securing employment on a packet plying between Cincinnati and New Orleans, soon worked his way up to the position of captain. In 1848 he went to Jacksonville, Ill., where his parents resided. Having had experience in the newspaper busi-

ness in Iowa, his first work after arrival at Minneapolis was as the commercial editor of a local daily. When the Chamber of Commerce was organized he was chosen as secretary, and held that position ever since. He was a fine-appearing man, and his mental powers were unimpaired by age.

ITEMS FROM ABROAD

Switzerland has abolished its import duties on corn and oats.

Germany's crops are suffering severely from the drought. Fodder is becoming scarce.

Crops in Southwestern Russia promise to fall far below the average. Three-fourths of the winter wheat has been lost, and rye has been seriously damaged.

India exported 522,000 quarters of wheat during the period from April 1 to May 27, against 1,406,000 quarters and 1,330,000 quarters during the corresponding periods of 1892 and 1891 respectively.

The shipments of wheat from India last week equalled 780,000 bushels; previous week, 960,000 bushels. Since April 1, the beginning of the crop year, to June 10, 5,904,000 bushels, compared with 13,933,000 bushels in the corresponding period in 1892.

Norway in the eight months ending March 31 imported 517,000 quarters of rye and 404,000 quarters of barley, and exported 1,500 quarters of oats. In the corresponding period of 1891-2 468,000 quarters of rye and 276,000 quarters of barley were imported, and 4,500 quarters of oats exported.

Russia is endeavoring to export its wheat in the form of flour. The statistics do not yet show any effect on the exports. Last year 280,000 sacks were exported, against 395,000 sacks in 1891. But Rome was not built in a day, and the upbuilding of an export flour trade by Russians will be a work of time.

From Russia and the Black Sea ports the exports of wheat, corn and barley since August 1 and up to May 27 have been 12,182,000 quarters, 3,885,000 quarters and 5,817,000 quarters respectively, against 8,243,000 quarters wheat, 1,162,000 quarters corn, and 4,347,000 quarters barley during the corresponding period of 1891-2.

The wheat crop which is now being exported from the Argentine Republic is large and of good quality. About 3,000,000 bushels is estimated as available for export. Since harvest weather conditions have been favorable for the movement of the crop. The low price, however, has caused the holding of much of the best quality in first hands in the country.

Belgium imported in the nine months ending with April 2,696,000 quarters of wheat, 76,200 quarters of rye, 821,000 bushels of barley, 2,531,000 hundredweight of other cereals, and 424,000 sacks of flour, against 4,555,000 quarters of wheat, 370,000 quarters of rye, 958,000 quarters of barley, 3,483,000 hundredweight of other cereals, and 572,000 sacks of flour in the corresponding months of 1891-2.

Belgium exported during the nine months preceding May 1 825,000 quarters wheat, 173,000 quarters rye, 115,000 quarters barley, 938,000 hundredweight other cereals, and 345,000 sacks wheat flour; compared with 1,834,000 quarters wheat, 359,000 quarters rye, 209,000 quarters barley, 2,289,000 hundredweight other cereals, and 772,000 sacks wheat flour during the corresponding period of 1891-2.

Ireland's yield per acre is creditable to Irish farmers. Last year the yield per acre was 29.36 bushels of wheat, 36.76 bushels of barley, 42.31 bushels of oats, 42.28 hundredweight of hay, 13.55 tons of turnips and 3.49 tons of potatoes. In Great Britain the yield was less, being 26.38 bushels of wheat, 34.61 bushels of barley, 38.80 bushels of oats, 19.11 hundredweight of hay, 17.12 tons of turnips and 5.80 tons of potatoes.

The report issued June 8 by the London Times gave the wheat crop of England and Wales at 17 per cent. below the average, English 27 and Welsh wheat 14 per cent. below the average. English oats are 24 per cent. and Welsh 14 per cent. below the average. Beans are 30 per cent. below the average in England and 20 per cent. in Wales. In Scotland barley is equal to the average, beans slightly above and oats one-third more than an average.

Some time ago a Russian gentleman—Mr. Kasse—devised a complete scheme of mutual insurance against bad harvests. The plan was elaborately worked out and published in the form of a book, accompanied by a great number of valuable statistical data bearing on the subject. No doubt the appearance of such a book the year after a great famine, and while several provinces were still suffering from the great calamity, explains the great impression produced by the book among financial and official circles. The Moscow University awarded the author the highest prize, and we understand that the Russian Ministry of Interior is busily engaged in framing

rules to adopt this scheme all over Russia. It is notorious that the mutual insurance against fire, carried very quietly but on an immense scale by the Zemstvos, is working exceedingly well in Russia. They do not build gorgeous palaces, over there, for their headquarters, but every penny of net profit is applied to reduce the cost of insurance, which, as a consequence, is exceedingly low.

Russia has exported from August 1 to May 6 7,255,000 quarters of wheat, 824,000 of corn, 1,881,000 of oats, 908,000 of rye, 4,076,000 of barley, 62,770 of buckwheat, 150,200 of pease, 75,370 of beans 68,460 hundredweight of millet and 112,700 280-pound sacks of wheaten flour; compared with 5,856,000 quarters of wheat, 406,000 of corn, 1,492,000 of oats, 1,747,000 of rye, 2,087,000 of barley, 14,450 of buckwheat 239,000 of pease, 102,000 of beans, 85,800 hundredweight of millet, and 87,600 sacks flour, during the corresponding period of 1891-2.

The growing wheat in England has been struggling with bad weather. During the months of March and April only one-third of an inch of rain fell against three inches usually. The heat during the day has been double the usual amount, and the sunshine increased 50 per cent. In the memory of the oldest inhabitant there has been no period to equal those two months in dryness, heat and sunshine. The heavy rains of May came just in time to save the thirsty crops from total failure. The early hay crop is much below the average, and the spring corn, too, is expected to turn out poorly. One effect of the peculiar weather conditions is the hastening of the growth of the autumn sown wheat, which will be ready to cut a month earlier than usual.

The *Mark Lane Express* (London) says: "The inordinate imports of American flour into London last week made trade slower than it would otherwise have been. At the risk of wearisome iteration it must once more be pointed out that these wholly needless orders are the chief cause of the present most serious depression in the London grain trade. Some stand against these purchases of wheat in the form of flour ought to be made. It is not a question of free trade or protection, but of the loss to the community of the chance of grinding the grain. Prices would not be inflated by a prohibition of wheat imports except as wheat, but the trade would be relieved from its most embarrassing feature. Last week 95,142 foreign sacks were brought into London, against 65,708 quarters of wheat."

The unusual sight of about 125 sailing vessels being afloat laden with wheat, with cargoes varying from 2,000 to 6,000 qrs. each, from the Argentine Republic, should not be passed unnoticed. It reminds one of twenty years ago, when nearly all the foreign wheat was brought to this country by sailing ships, small and large, which were able to find a market in almost any of the small English ports, and for which, consequently, the competition was much greater than, for instance, is the case in the present day, when to handle a cargo means to deal with 10,000 to 15,000 qrs. Steam has usurped sailing ships in the grain-carrying trade, but the change has not been beneficial to those engaged in the business of buying and selling grain. For every sailing vessel of 3,000 qrs. there used to be perhaps twenty competing buyers; to-day a bulky steamer with 12,000 to 15,000 qrs. finds only a very limited number of probable buyers. Thus the fact that 125 sailers with La Plata wheat are afloat to this country is worth noting, inasmuch as many millers who have for years been constrained to deal in parcels, can now buy their cargoes. The La Plata wheat of this season is said by those millers who have already tried it to be a very good serviceable wheat, whilst the fact that for some months it has practically been the cheapest wheat in the market is a decided point in its favor.—*Millers' Gazette, London.*

PERSONAL

J. C. Londstrom has returned to his former position in Hoyt's elevator at Chillicothe, Ill.

John Kyle, who has been in the employ of Cargill Bros., elevator men at Dover, Minn., has moved to Fairmont, Minn.

F. H. Peavey, the well-known grain man of the West, has given the sum of \$10,000 to build a library at Eastport, Me., in memory of his father, A. D. Peavey.

Mr. Henderson, formerly of Rock Rapids, has moved to Sioux Centre, Ia., to take charge of the "Midland Elevator," now owned by the J. Q. Adams Company.

Superintendent Thompson of the new "Terminal Elevator" at Superior, Wis., has moved his family from his former residence at Sioux Falls, S. D., to Duluth. He was formerly in the elevator business at Sioux Falls.

THE MARKETS.

We will be pleased to publish under this head short reviews of the conditions ruling in the different markets. Copy must reach us by the morning of the 14th of each month.

HAY AT CHICAGO—The receipts for the week ending June 10 were 8,658 tons, against 4,816 tons the previous week. Shipments for the week were 763 tons, against 493 tons for the previous week. Arrivals of both timothy and upland prairie hay were excessively heavy during the week, and the market was overstocked. No. 1 timothy ranged at \$10.50@12.25; No. 2, \$10.00@10.75; mixed, \$9.50; not graded, \$10.00@11.50; Illinois upland prairie, \$5.00@7.50; Indiana, \$5.00; Kansas, \$9.50@12.00; Dakota, \$7.00; Iowa, \$4.00@6.00 for poor and heating, \$8.00@9.50 for coarse to good, and \$10.00@12.50 for choice to fancy; packing hay, \$5.00; wheat straw, \$5.00@6.75; oat straw, at \$5.00@5.50, and rye straw at \$9.

The report of M. M. Freeman & Co. for Monday, June 12, gives receipts, 1,377 tons; shipments, 221 tons. **TIMOTHY**: Market weak and dull. Offerings large. No. 1, \$10.50@11.50; No. 2, \$9.00@10.00; mixed, \$8.00@9.00. **PRairie**: In heavy supply and weak. Even at prices quoted it is not moving, strictly choice articles only finding buyers. Choice Kansas upland, \$9.50@10.50; choice Iowa upland, \$9.00@10.00; good Iowa and Kansas upland, \$7.00@8.50; good feeding hay, \$6.00@7.00. **STRAW**: Receipts light. Market improving. Rye, \$9.00@10.00; wheat, \$6.00@7.00; oats, \$5.00@6.00. Market is overstocked with hay—tame and wild—and which consists of the medium to poor grades. The choice qualities find sale, but the lower are wholly neglected and have accumulated to a serious extent. Demand is light, and even the low prices current seem to be no inducement for buyers to take hold, the consequence of which is that the accumulation of hay is growing daily, for fresh arrivals continue heavy.

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General offices: 160 and 172 Adams street, Chicago. Industrial Department.

The Chicago, Milwaukee & St. Paul Railway Company's 6,150 miles of road traverses a vast territory, rich in all the resources that insure industrial success.

The industrial department is conversant with the iron, coal, lumber, and tanbark, the water power (both river and artesian) for factory and electric power purposes, the markets, the transportation and financial facilities, and other interests on the line pertaining to industrial development, and disseminates information concerning same.

A number of new factories have been induced to locate—largely through the instrumentality of this company—at enterprising town on its lines.

As the interest of the company is to secure the location of industries at places where the surroundings will insure their permanent success, the information furnished a particular industry is pertinent and reliable.

In the Eastern states, and in other parts of the world, factories are so congested and distant from the actual market as to result in fierce and destructive competition. That of the West is taking a place as one of the great manufacturing territories of the world is forcibly impressing itself upon discerning and enterprising manufacturers. Steps should be taken by such while the field is as yet not fully covered, and while inducements are still being offered, to locate in the West.

Individuals or companies wishing to embark capital in Western industry can find a profitable field.

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Industrial Commissioner.

C., M. & St. P. Ry., 160 Adams street, Chicago, Ill.

B. & O.'S NEW THROUGH LINE.

PREPARING FOR THE IMMENSE TRAFFIC INCIDENT TO THE WORLD'S FAIR.

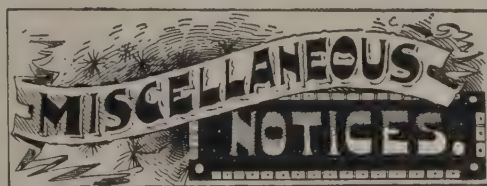
The management of the Baltimore & Ohio Railroad is preparing for an immense business in 1893, while the World's Fair is open in Chicago. The terminals at Chicago are capable of accommodating a much heavier traffic than is now being done, and important changes are being arranged for the handling of very heavy freight and passenger business to the West from New York, Philadelphia and Baltimore. New equipment for largely increased passenger business and an extensive stock of freight cars have been ordered. The various roads of the system will be improved by straightened lines, reduced grades, extra side tracks and interlocking switches. The new line between Chicago Junction and Akron has shortened the distance between Chicago and tidewater twenty-five miles, and between Pittsburg and Chicago fifty-eight miles.

The distance between Chicago and Pittsburg and Chicago and Cleveland by the construction of the Akron line and the acquisition of the Pittsburg & Western line and the Valley Railroad of Ohio is about the same as via the Lake Shore from Cleveland to Chicago, and by the Pennsylvania from Pittsburg to Chicago. The alignment is to be changed and grades reduced to a maximum of twenty-six feet. It is expected that within twelve months the old Baltimore

& Ohio through line between Chicago and the Atlantic Ocean will have passed away and the new line via Pittsburg be established, with no greater grades or curvature than on any of the trunk lines.

Work has already begun east of Pittsburg to meet improvements making west of Pittsburg. These improvements will consist of additional second and third tracks, a general correction of the alignment and completion of the double track on the Metropolitan Branch. It is expected that the new through line will be ready simultaneously with the completion of the Belt Line through the city of Baltimore, which is intended to unite the Washington branch with the Philadelphia division and do away with the present line via Locust Point. Forty new and powerful locomotive engines were added to the equipment during the last two months, and others are in process of construction. The permanent improvements now under way and in contemplation involve the expenditure of some \$5,000,000.—*Baltimore American*.

Insurance companies are feeling jubilant over the termination of the suit brought by the Thompson Feed Mill against Van Deusen & Co. of Minneapolis, in which the former secured a verdict recently holding the latter liable for the destruction of the feed mill, caused by the fall of the rear portion of the Star elevator. The owners of the elevator claim that fire caused the fall of the structure, and, in consequence, they are trying to hold the insurance companies responsible for the loss. This decision, it is stated, greatly strengthens the case of the insurance companies contesting the loss.—*Inter Ocean*, Chicago.



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The Royal Chicory Manufacturing Company manufactures the highest grades of imported chicory. Orders solicited. Address

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ENGINE SALESMAN WANTED.

A good gasoline engine salesman on salary, commission or both is wanted by a successful Western engine company. State experience, salary expected, etc. Address

Box 52, care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

POSITION AS MANAGER WANTED.

I want a position as grain buyer and manager of station. Have been employed by one firm seven years. Can furnish very best of references. Will go to any state. Address

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A good elevator is for rent or sale. It is situated in the center of a fine farming country at the intersection of the Kansas City Branch of the C., R. I. & P. R. R. and the main line of the C., B. & Q. Address or inquire of

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DIRECTORY OF GRAIN DEALERS.

Kingsley's Directory is the only complete work containing the name and address of every firm engaged in the following lines of business: Grain, milling, flour and feed, hay and straw, butter and eggs, fruit and produce, malting, brewing, distilling and poultry. New edition, thoroughly revised. Over 500 pages octavo, substantially bound in cloth. Indispensable to those who wish to reach the lines of business named above. Price \$3.50. Sent postpaid on receipt of price. Address

LEE KINGSLEY & Co., Syracuse, N. Y.

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I wish to rent or buy an elevator in a good locality. Send description and state whether it is run by horse power or engine. Address

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POPLAR TIMBER FOR SALE.

I have for sale 25,000 selected poplar trees on Louisa Fork of Big Sandy tributary to Ohio River by water; and 35,000 selected trees on north fork Kentucky River, 24 inches and up in diameter. Jackson or Beatysville are railroad points for this timber. For sale in groups 10 to 50,000 trees. Address

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DAVIS GRAIN TABLES.

The value of wheat or any grain at 60 pounds to the bushel, for any amount less than 100 bushels is shown without addition or multiplication, and for any amount over 100 and under 1,000 bushels, with but a single addition; at any price from 25 cents to \$1.25 per bushel. The value of bushels and pounds of other grain also is shown at 56, 48 and 32 pounds to the bushel at any price from 15 cents to \$1.50 per bushel. Price, postpaid, \$1.25. Address

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NEW YORK CENTRAL ELEVATORS.

WEST SHORE ELEVATOR.

1 AND 3 BEAVER STREET.

Gibson L. Douglass, Manager.

NEW YORK, May 26, 1893.

J. A. DEMUTH, Esq.—Dear Sir:—We are using nineteen "check beams" on the Fairbanks' Scales at N. Y. C. & H. R. R. Elevator, and sixteen at the West Shore R. R. Elevator. Have discovered a number of errors through their use, during the past two years, and consider them a good thing.

Yours truly,

G. W. PHELAN, Supt.

[Signed.]

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Big money in a new metallic siding and roofing: patent for sale cheap. Address

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I will sell one No. 1 Victor Corn Sheller and Cleaner and one 20-inch French Burr Mill. Address

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One 1,000-bushel Fairbanks Hopper scale; only used two years; good as new, for sale. Price, \$150. Address

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The "Gill & Wright Mills," situated at Duluth and Superior, capacity of 500 and 400 barrels respectively, for sale. Address

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Will sell 160 acres, 1 1/2 miles from Sterling, county seat. Well improved, all fenced, plenty perpetual water rights with place. Price \$20 per acre. A bargain. Address
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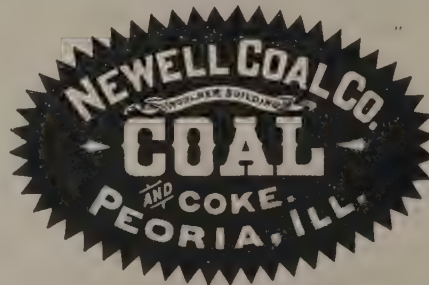
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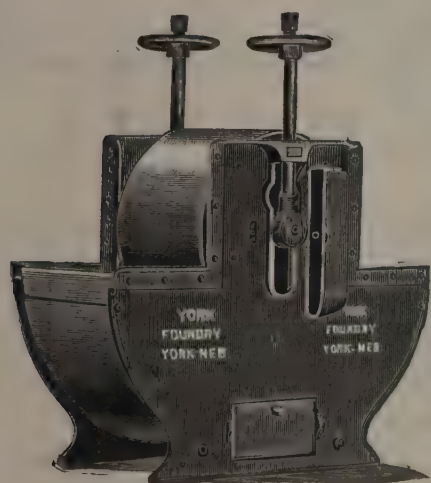
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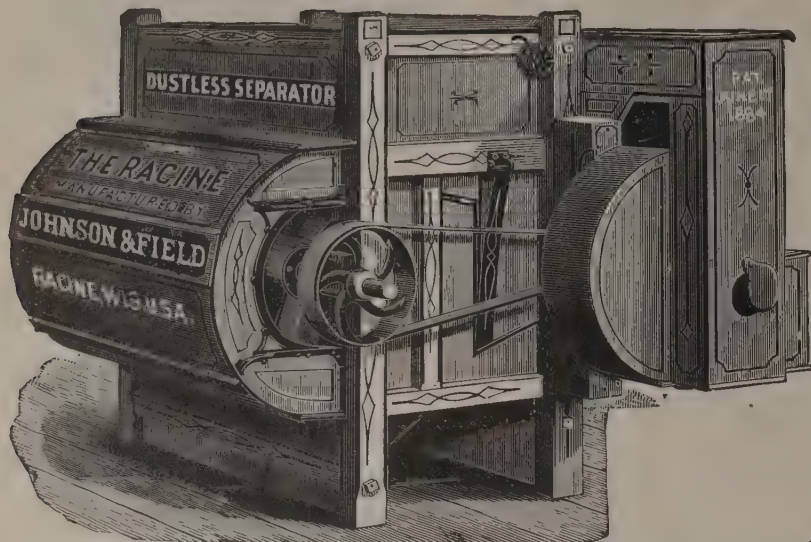
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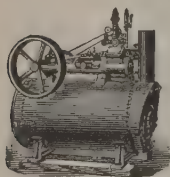
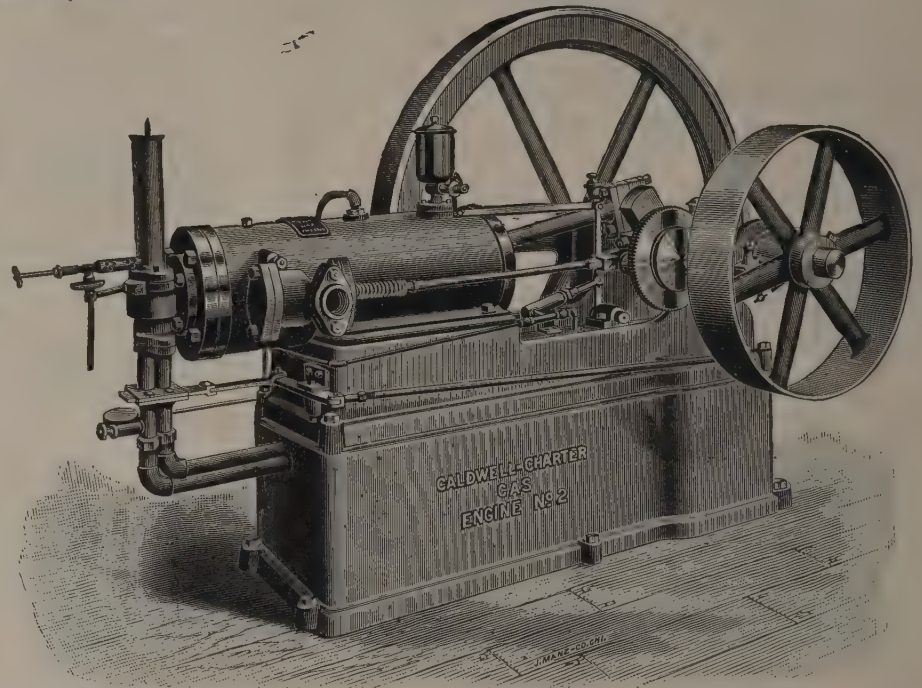
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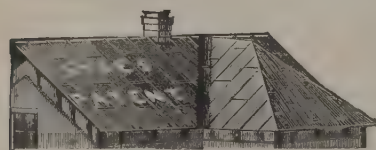
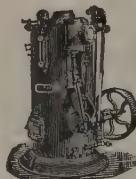
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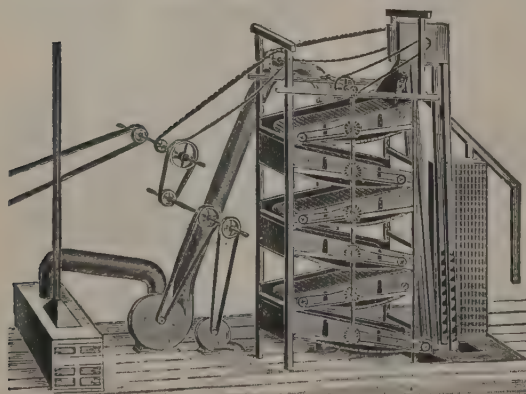
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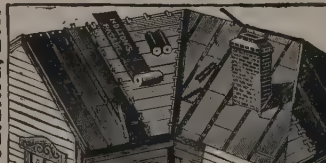
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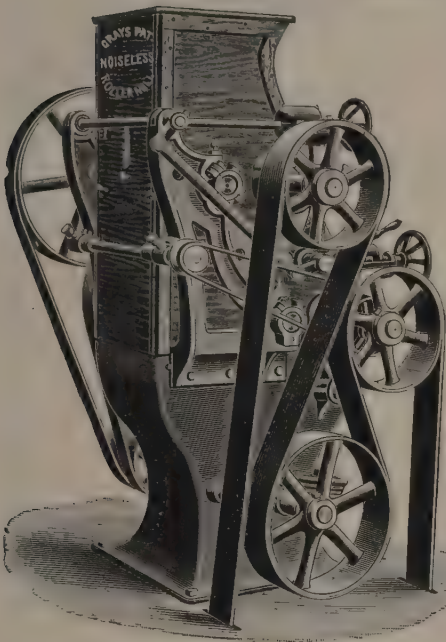
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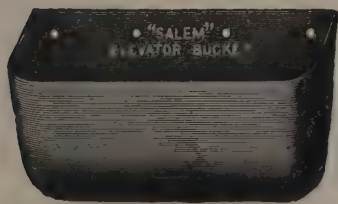
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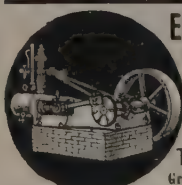
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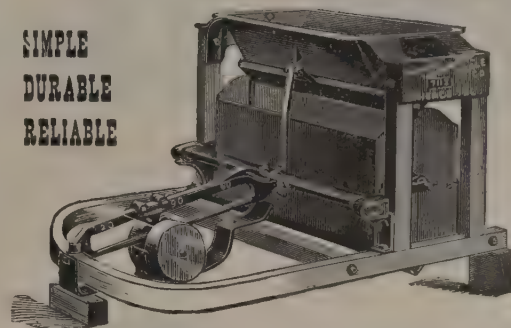
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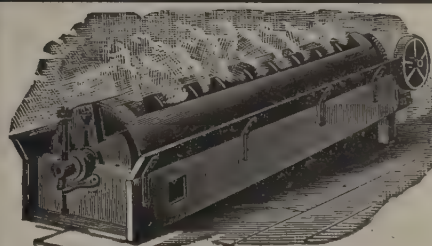
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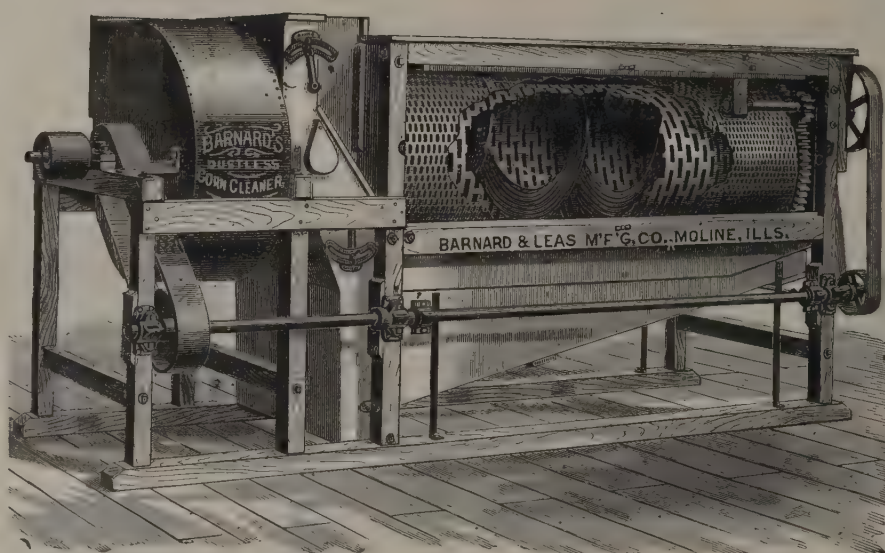
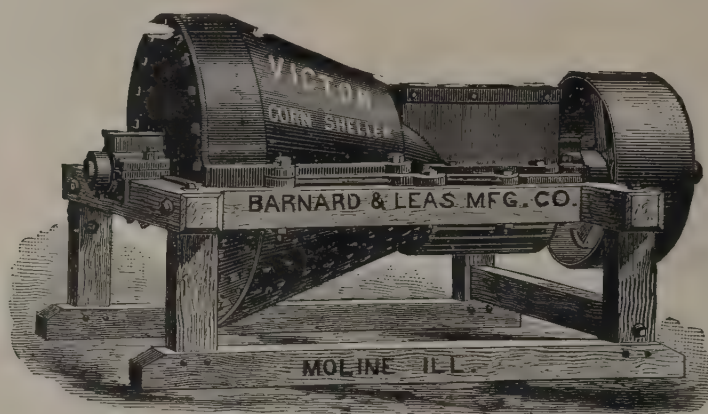
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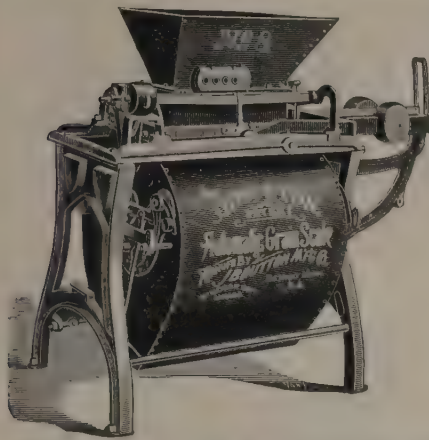
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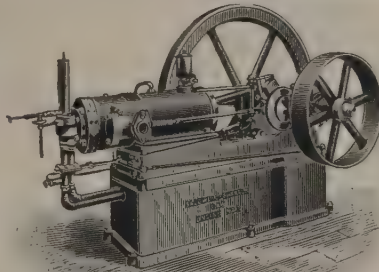


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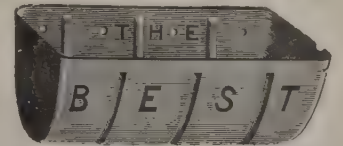


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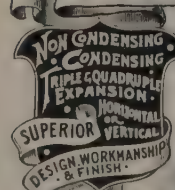
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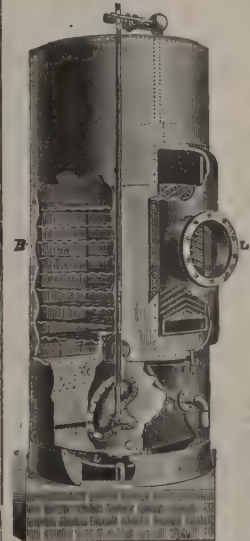


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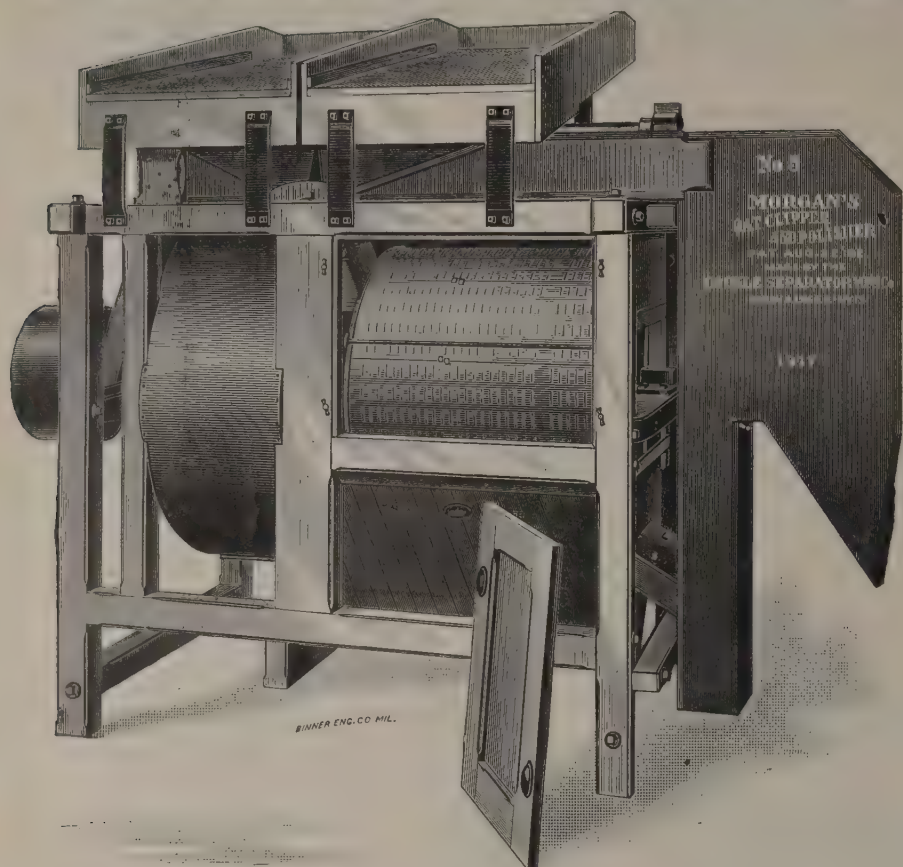
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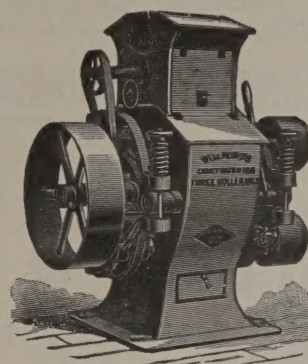
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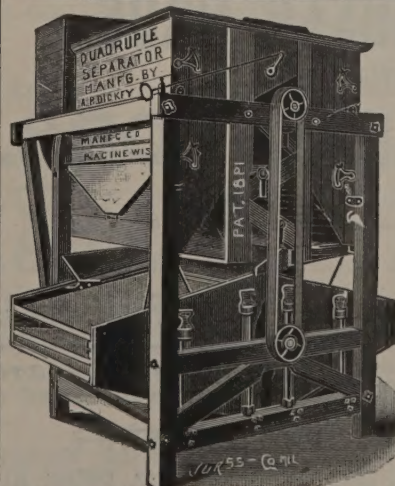
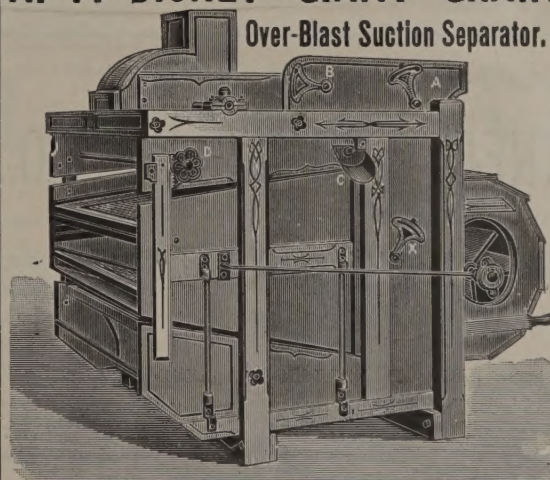
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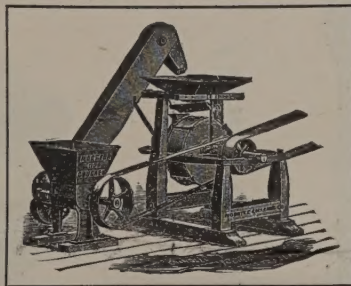
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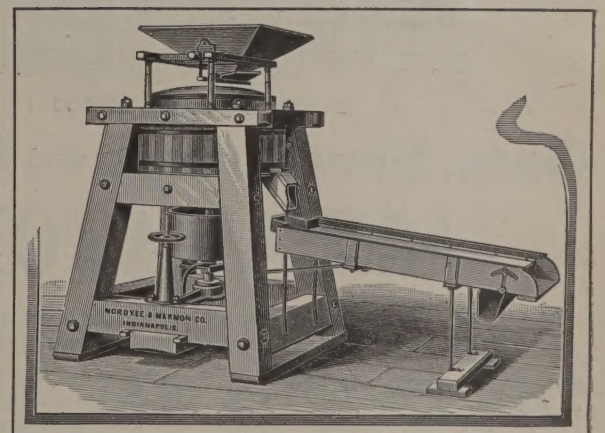
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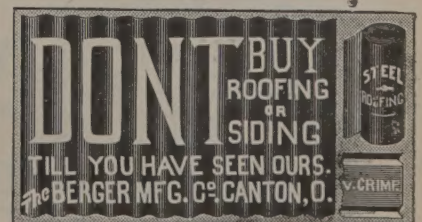
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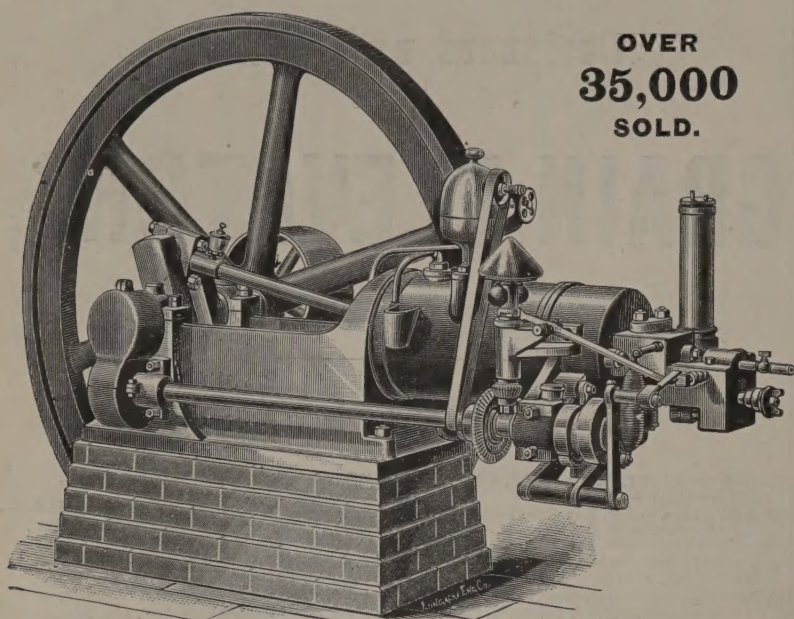
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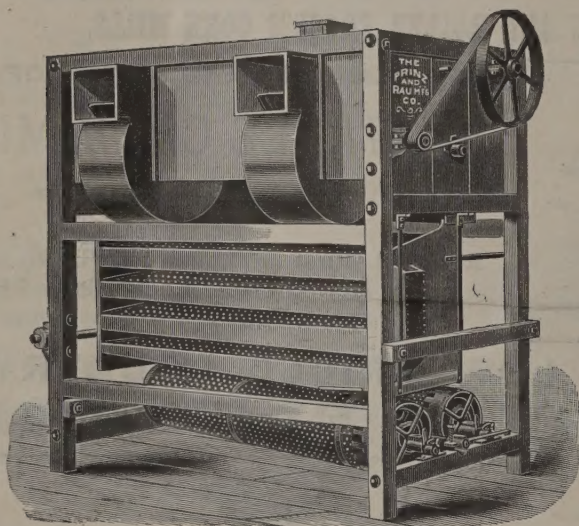
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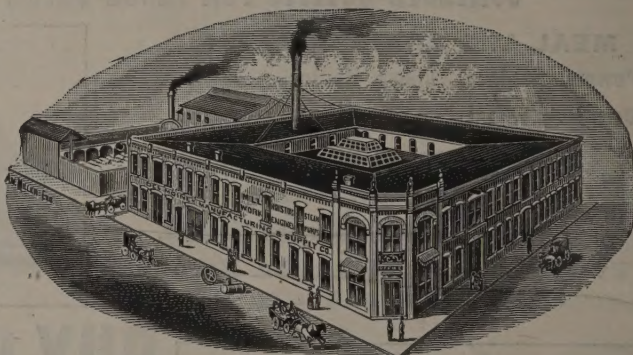
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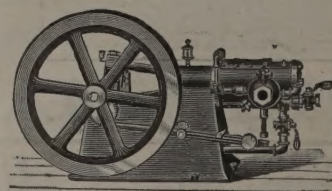
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